

Public Works
Department

March 23, 2011

Federal Highway Administration
Attn: Mr. Bruce Friedman
1200 New Jersey, S.E.
HOTO-1
Washington, DC 20590

SUBJECT: 8-83 (E) – Symbol Sign Warning Pedestrians to Look for Second Train –
Riverside, CA – First Semiannual Report

Thank you very much for the opportunity to provide the Federal Highway Administration (FHWA) with the first of four semiannual reports documenting the City of Riverside's evaluation of the two "Additional Trains May Approach" signs as shown below to measure their effectiveness in promoting pedestrian and bicyclist safety traversing at-grade railroad crossings with multiple tracks.



Sign No. 1



Sign No. 2

In a letter dated October 14, 2009 FHWA approved the City's proposal to conduct experimentation related to the above signs. Subsequent to FHWA's approval, on January 21, 2010, the California Traffic Control Device Committee (CTCDC) also approved the City's experimentation proposal. The CTCDC requested that the City share its FHWA semiannual reports with committee members.

On July 21, 2010 the City completed sign installation at twenty-two at-grade crossings with multiple railroad tracks as indicated on the enclosed exhibits. The experiment installed two variations of the "Additional Trains May Approach" signs, as shown above to expose pedestrians and bicyclists to both types of signs in their daily activities. In

addition, the signs were mounted at the MUTCD pedestrian/bicyclist recommended height of five feet (as illustrated on the exhibits) to garner maximum pedestrian attention.

The study's primary objective is to help determine which sign or series of signs will be most effective, well received, and understood by the general public in an effort to minimize train and pedestrian/bicyclist conflicts. In conducting the study, the City recognizes that these signs will be installed within or near the railroad right-of-way and care will be taken to ensure vehicle/train sight visibility or visibility of railroad signal equipment and signs is not compromised. The City will continue to work with the Burlington Northern Santa Fe (BNSF), Union Pacific (UP) and the California Public Utilities Commission (CPUC) to ensure the ongoing sign experiment augments overall safety at railroad crossings with multiple tracks.

After working with FHWA on acceptable sign graphics and messages for the two experimental signs, the City met with CPUC, BNSF, and UP to develop goals for the project. The selected goals can be measured and analyzed to ensure signs are effective and their placement will not compromise railroad crossing safety.

The goals developed for the experiment include the following:

1. Measure the effectiveness of the two signs by surveying students and the general public with questions that will determine each sign's effectiveness in reducing conflicts between trains and pedestrians/bicyclists
2. Measure school age children's and the general public's comprehension of the signs. In particular, the City seeks to measure the public's comprehension of each sign's ability to illustrate that additional trains may approach from either direction when the railroad lights and bells are on and the gate arms are down
3. Determine whether Sign No. 1 or Sign No. 2 is more effective in conveying that additional trains may approach
4. Determine if the signs installed at a height of five feet of ground level are vandalized at much higher rate by graffiti, stickers or other means, compromising their message or minimizing their effectiveness
5. Measure the percentage of students or general public that have entered a railroad crossing when the bells and flashers were on and/or gates down and their reason(s) for doing so
6. Review the survey responses to determine if ultimately the signs' graphics and/or messages on either sign need to be modified for better comprehension. Determine if an additional sign needs to be placed to explicitly inform the public not to enter the crossing when the railroad signal equipment is engaged
7. Survey Traffic Management Center (TMC) staff to determine if their observations of at-grade crossing with multiple tracks noted compliance or violations by pedestrians and bicyclists
8. Document any motorist concerns regarding the signs, especially if motorists noted that the signs obstructed sight distance or railroad signal equipment

This reporting period covers **July 21, 2010 through January 21, 2011**. The survey results and responses are enclosed. Outlined below are some of the key survey findings:

- 18% of all surveyed, primarily students, said they have entered a grade crossing when the bells and flasher were on, of those 50% said they were in a hurry and 17% of those said they thought it was safe to cross
- 94% said they understood the message of Sign No. 1 (symbol & message), while only 85% said the same of Sign No. 2 (symbol only)
- Close to 70% of all surveyed preferred Sign No. 1 (symbol & message) and only 30% believed Sign No. 2 better illustrates the message
- 52% believed that these signs to a “great” extent would improve pedestrian and bicyclist safety at crossings and 44% believed the signs would provide “some” degree of added safety. In total, 96% of all surveyed believed that the signs are warranted and would improve safety at crossings with multiple tracks
- There were no documented incidents that noted motorist complaints or concerns of sight visibility restrictions of trains or railroad equipment.

In analyzing some of the detailed responses from the survey, the City noted that expansion of the survey to include additional questions aimed at determining if respondents understand that these signs apply when the railroad signal equipment is active and the gates are down was needed. For example, the question “Does Sign No. 1 or Sign No. 2 remind you to look both ways before crossing the tracks?” elicited the following:

1. “Look both ways before crossing, trains come from both directions” – Respondent #8
2. “To look both ways before crossing” – Respondent #24, #44, 92
3. “To Stop” – Respondent #30
4. “To look both ways before attempting to cross railroad tracks” – Respondent #63
5. “For safety – check both ways before crossing” – Respondent #76

Although the responses were favorable, the question may need rewording to determine if respondents understand that the signs do not imply that entering the tracks is permissible after looking both ways when railroad equipment is active. From the responses, others may think that they have to stop or slow down and look both ways before crossing when the railroad equipment is not active. In either case, the survey would benefit from additional questions to determine if respondents comprehend that the signs are warning pedestrians and bicyclists not to enter the crossing when the crossing equipment is active. The City is proposing the additional survey questions:

1. Does Sign No. 1 and/or Sign No. 2 warn you not to enter the railroad crossing when the railroad equipment is active and the gate arms are down?
2. Does Sign No. 1 and/or Sign No. 2 warn you to look in both directions when the railroad equipment and arms are not engaged?
3. Does Sign No. 1 and/or Sign No. 2 warn you to slow down or stop before entering a railroad crossing when the railroad equipment and arms are not engaged?
4. What suggestion(s) would you recommend to stop pedestrians/bicyclists from crossing when the lights are flashing?

In addition, the survey will include the following message and graphic signs to determine if an additional sign should augment Sign No. 1 or Sign No. 2



SIGN A

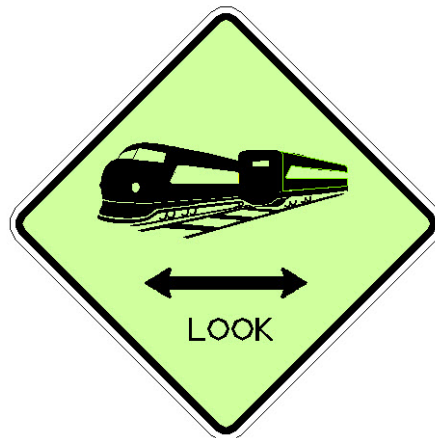
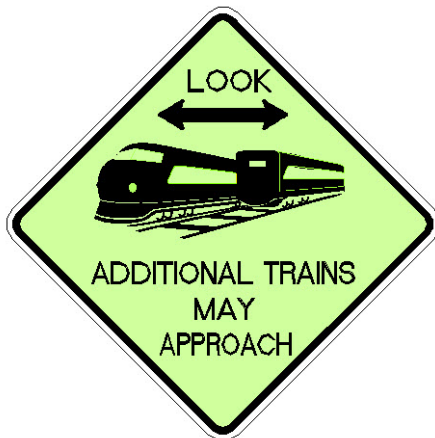


SIGN B



SIGN C

The goal of the sign series is to explicitly warn pedestrians and bicyclists not to enter an active crossing. Based upon survey responses, an additional sign posted below Sign No. 1 or Sign No. 2 may be appropriate. For comparison purposes, respondents will also be shown the same series of signs with a fluorescent yellow-green background to determine if the background color makes a difference in capturing the public's attention. Fluorescent yellow-green background color is typically associated with pedestrian crossings and the study will show if pedestrians and bicyclists are more receptive to this color or the color elicits more attention by the public. The signs would look like the following:

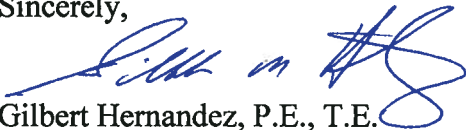


Finally, the next reporting period will include survey feedback from bicyclists regarding the sign installation location and determining if the signs are visible to bicyclists. The signs were installed on the right side of sidewalks or further behind curb. Thus, City wishes to find out if bicyclists have sight visibility to the signs, are aware of and complying with them.

The City of Riverside will continue to document the experiment results and work with FHWA to propose a sign or combination of signs that are effective, practical, and well understood by the public to improve safety at rail crossings with multiple tracks. The City welcomes FHWA and/or CTCDC comments on the proposed additional survey questions, augmenting signs (Sign A, Sign B, and Sign C), and fluorescent yellow-green background color to provide a comprehensive sign or series of signs that explicitly warn pedestrians and bicyclists not to enter active railroad crossings.

Thank you for your time. If you have any questions, comments or suggestions, please contact Mr. Steve Libring, City Traffic Engineer, at 951-826-5368, or myself at 951-826-5148.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gilbert Hernandez', is written over the typed name.

Gilbert Hernandez, P.E., T.E.
Senior Traffic Engineer

cc. File, Chrono, Siobhan Foster, Tom Boyd, Steve Libring, CTCDC

City of Riverside - Experimental Railroad Sign Survey

Date: 14 February 2011

Question 1 Have you ever entered a grade crossing when the bells and flashers were on?

Yes 18
No 81

Did Not Answer 1

Question 1a What are your reasons for Doing So?

a I thought it was safe
b I was in a hurry
c Refused to Answer
d Other
Already on Tracks
Train did not appear in over 10 minutes
f NA

Question 2 See 2nd Sheet

Show Exhibit A and follow Steps 1 & 2

Question 3 Does Sign#1 Remind you to Stop and look both ways before crossing the tracks?

Yes 94
No 6

Question 4 See 2nd Sheet

Show Sign #2 (Diamond Symbo, Look + Arrow)

Question 5 Does Sign #2 Remind you to Stop and look both ways before crossing the tracks?

Yes 85
No 15

Question 6 Which Sign do you think should be most effective?

a Sign 1 (Diamond, Symbol, Look + Arrow, "Additional Trains May Approach")
c Sign 2 (Diamond, Symbol, Look + Arrow)
e Cannot Read Text Signs
f Don't Know
g Refused To Answer

Question 7 To what extent do you think one of these signs will improve safety at a crossing?

a Great Extent
b Some Extent
c Not at All
d Don't Know
e Refused to Answer

Question 8 What is Your Age Group

a 16 or Younger
b 17 to 29 Years
c 30 to 64 Years
d 65 or Older
e Refused to Answer

Question 9 To which of the following racial or ethnic groups do you feel you most belong?

a African American
b Asian
c Latino
d White
e Other

Male 49
Female 51

Survey English

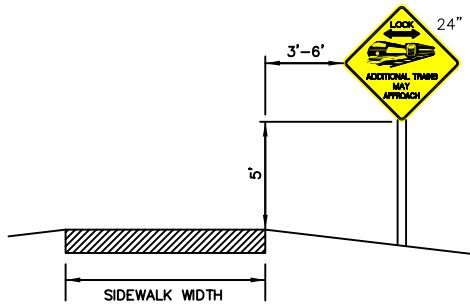
I Railroad Sign Survey

Number	Question #2	What Does this Sign #1 tell you?		Question #4	What Does Either Sign #3 or #4 tell you?
1	16 Yrs/Male	That Trains are coming from both ways		16 Yrs/Male	That a Train may come
2	16 Yrs/Male	That 2 trains may approach		16 Yrs/Male	That a train might come from behind the approaching one
3	17-29yrs/Male	That an additional train may come		17-29yrs/Male	To look both ways
4	16 Yrs/Male	More than 1 train can approach		16 Yrs/Male	Did not Respond
5	16 Yrs/Male	That Trains Pass Through the Area		16 Yrs/Male	That Trains Pass Through the Area
6	16 Yrs/Male	Look before you cross a railroad track		16 Yrs/Male	Look before you cross a railroad track
7	17-29yrs/Male	Look both ways		17-29yrs/Male	Pay Attention
8	16 Yrs/Male	Look both ways before crossing, trains come from both directions		16 Yrs/Male	Look both ways
9	16 Yrs/Male	To look both ways		16 Yrs/Male	To look both ways
10	65 or older/Female	Look Both Ways		65 or older/Female	Look Both Ways
11	16 Yrs/Male	Tells me to look both ways		16 Yrs/Male	To look around
12	16 Yrs/Male	Look both ways		16 Yrs/Male	Two trains may approach at the same time
13	16 Yrs/Male	Trains come from both directions		16 Yrs/Male	Look both ways
14	16 Yrs/Male	That when one train ends that another train may be coming		16 Yrs/Male	To look, stop an listen
15	65 or Older Male	To look both ways		65 or Older Male	To look both ways
16	16 Yrs/Male	Trains may approach from additional directions		16 Yrs/Male	Tells you that trains might approach from both ways and sign 2 doesn't
17	17-29yrs/Male	Other Trains are coming		17-29yrs/Male	Look for trains
18	16 Yrs/Male	A train may come		16 Yrs/Male	Look both ways
19	17-29yrs/Male	More than 1 train might be approaching		17-29yrs/Male	To look before you cross
20	16 Yrs/Male	That other trains may approach		16 Yrs/Male	To look both ways
21	16 Yrs/Male	2 Trains will pass by		16 Yrs/Male	A train may or may not come
22	16 Yrs/Male	To pay attention to both sides of the tracks there may be more than 1 train		16 Yrs/Male	Just look both ways
23	16 Yrs/Male	Look, additional trains may approach		16 Yrs/Male	Look
24	16 Yrs/Male	To look both ways before crossing		16 Yrs/Male	To be careful before crossing
25	16 Yrs/Male	That a train is coming		16 Yrs/Male	That a train is coming

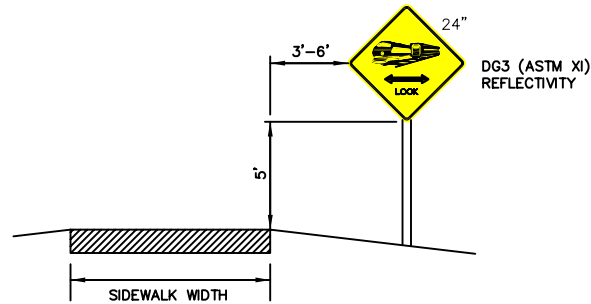
Number	Question #2	What Does this Sign #1 tell you?		Question #4	What Does Either Sign #3 or #4 tell you?
26	16 Yrs/Male	To look both ways before crossing		16 Yrs/Male	To look both ways before crossing
27	16 Yrs/Female	That the a train may be coming		16 Yrs/Female	That the a train may be coming
28	17-29yrs/Female	Trains can come from both sides, different directions		17-29yrs/Female	To look both ways
29	16 Yrs/Female	Look both ways		16 Yrs/Female	Look both ways
30	16 Yrs/Female	To Stop		16 Yrs/Female	To stop because trains may be coming from both directions
31	16 Yrs/Female	To look both ways		16 Yrs/Female	There may be 2 trains approaching
32	16 Yrs/Female	To look both ways		16 Yrs/Female	To look both ways
33	17-29yrs/Female	Look both ways		17-29yrs/Female	to look both ways because 2 trains may be coming
34	17-29yrs/Female	Two trains may approach at the same time		17-29yrs/Female	Be careful
35	16 Yrs/Female	Additional trains may approach		16 Yrs/Female	To look
36	16 Yrs/Female	That trains are coming		16 Yrs/Female	To stop
37	16 Yrs/Female	Look both ways		16 Yrs/Female	Look both ways
38	16 Yrs/Female	Look before you go and listen if they tell you to stop		16 Yrs/Female	Look both ways
39	16 Yrs/Female	Look both ways because there are multiple tracks		16 Yrs/Female	To look both ways
40	30 to 64/Female	Look both ways be sure tracks are clear		30 to 64/Female	always look both ways
41	17-29yrs/Female	That trains travel in both directions		17-29yrs/Female	That trains travel in both directions
42	16 Yrs/Female	That more than one train may be coming		16 Yrs/Female	To look both ways
43	16 Yrs/Female	Warns you that there are 2 tracks		16 Yrs/Female	Warns you to look out for trains
44	16 Yrs/Female	Look both ways before crossing		16 Yrs/Female	Look both ways before crossing
45	16 Yrs/Female	There may be 2 trains approaching, look both ways		16 Yrs/Female	There may be 2 trains approaching, look both ways
46	16 Yrs/Female	Look both ways because a train may come		16 Yrs/Female	look for any passing or approaching train
47	16 Yrs/Female	That more trains may approach		16 Yrs/Female	Look both ways
48	16 Yrs/Female	Look both ways		16 Yrs/Female	Trains Coming
49	30-64Yrs/Male	Sign tells you to look both ways		30-64Yrs/Male	Two trains are coming
50	17-29yrs/Female	Same meaning. The extra information is implied and depending on the speed may not be easy & quick to read		17-29yrs/Female	Look in both directions for trains

Number	Question #2	What Does this Sign #1 tell you?		Question #4	What Does Either Sign #3 or #4 tell you?
51	17-29yrs/Male	Caution		17-29yrs/Male	Look and be aware of surrounding
52	17-29yrs/Female	Look both ways to see if trains are approaching		17-29yrs/Female	Look for trains left and right
53	17-29yrs/Female	Look at the railroad for operating trains		17-29yrs/Female	Look both ways
54	17-29yrs/Female	Look both ways of the train tracks even after a train has passed		17-29yrs/Female	To look both ways
55	17-29yrs/Female	A train may approach from either side		17-29yrs/Female	Look both ways
56	17-29yrs/Female	Make sure you look and don't go pass the tracks when the arms are down because there may be other trains passing		17-29yrs/Female	Look before you go over the railroad tracks
57	30 to 64/Female	Trains may come from both directions		30 to 64/Female	Look both ways
58	17-29yrs/Female	No Response		17-29yrs/Female	No Response
59	17-29yrs/Female	Another train may be coming from the other side		17-29yrs/Female	Be sure to look both ways
60	30-64Yrs/Male	A train has already approached and that more may come		30-64Yrs/Male	Look before crossing
61	17-29yrs/Female	That another train may be coming. I need to stop & look		17-29yrs/Female	Look both ways for trains coming and see if it is safe to go
62	17-29yrs/Female	To Look		17-29yrs/Female	Look
63	17-29yrs/Female	To look both ways before attempting to cross RR tracks		17-29yrs/Female	To look and be aware of possible trains passing by on the tracks
64	17-29yrs/Female	Look, additional trains may approach		17-29yrs/Female	They both tell me to look for additional trains
65	17-29yrs/Female	To look before crossing		17-29yrs/Female	To look
66	17-29yrs/Female	Train or Trains are approaching		17-29yrs/Female	To Watch for Trains
67	17-29yrs/Male	The crossing has multiple tracks		17-29yrs/Male	Same - less clearly
68	17-29yrs/Male	That additional trains may be coming		17-29yrs/Male	That additional trains may be coming
69	17-29yrs/Female	Watch for trains		17-29yrs/Female	That there may be trains there
70	17-29yrs/Male	More trains passing		17-29yrs/Male	To look at the tracks to see if additional trains are coming
71	17-29yrs/Male	To look for multiple trains that may be approaching at the same time		17-29yrs/Male	To look both wasys for oncoming traffic
72	17-29yrs/Female	To always look before driving through		17-29yrs/Female	Sign #1 gives more information and is better for safety
73	17-29yrs/Male	More trains may be approaching		17-29yrs/Male	To look both ways before crossing
74	17-29yrs/Male	More than one train is coming		17-29yrs/Male	That there are trains coming
75	17-29yrs/Male	Additional trains may approach		17-29yrs/Male	To look both ways before crossing

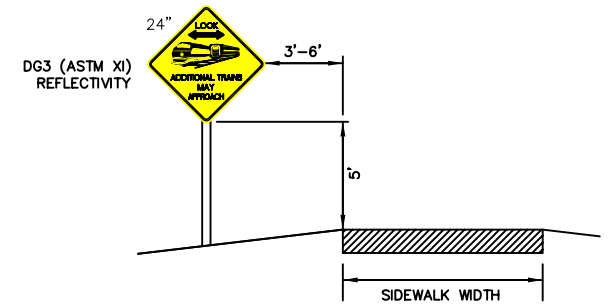
Number	Question #2	What Does this Sign #1 tell you?		Question #4	What Does Either Sign #3 or #4 tell you?
76	17-29yrs/Male	For Safety - check both ways before crossing		17-29yrs/Male	Double check (look both ways) before you cross
77	17-29yrs/Female	Watch out for trains		17-29yrs/Female	Look both ways for trains
78	17-29yrs/Female	There could be another train approaching		17-29yrs/Female	wait, look both ways. Never cross when gates & signs are down.
79	17-29yrs/Female	Look both ways for trains - they may be crossing		17-29yrs/Female	Look both ways, trains are crossing. But you process (interpret) this one faster
80	17-29yrs/Female	There may be more than one train - look both ways		17-29yrs/Female	Both signs would have me look both ways
81	30-64Yrs/Female	Stop, wait, proceed when lights & bells are off		30-64Yrs/Female	Look and wait till safe
82	17-29yrs/Female	That more trains are coming		17-29yrs/Female	Look both ways, another train may be coming from another direction
83	17-29yrs/Male	There may be two trains at once		17-29yrs/Male	Look both ways
84	17-29yrs/Male	Two trains may be approaching or departing		17-29yrs/Male	To look twice before you cross the tracks
85	17-29yrs/Male	More trains might cross		17-29yrs/Male	Just to look, but nothing on the sign tells you of the warning
86	17-29yrs/Female	That more than one train may cross the tracks going in either direction		17-29yrs/Female	To look both ways before crossing
87	17-29yrs/Female	There may be more than one train crossing/approaching your way		17-29yrs/Female	Same as the first sign
88	17-29yrs/Female	To look to be sure another train is not coming		17-29yrs/Female	To look before you cross the tracks
89	17-29yrs/Male	There may be more than one train		17-29yrs/Male	The first sign says "more than one train", the other implies just one train
90	17-29yrs/Male	Train is coming		17-29yrs/Male	
91	17-29yrs/Male	Additional trains may approach		17-29yrs/Male	Look
92	17-29yrs/Female	Look both ways before crossing		17-29yrs/Female	A train may be coming, be cautious
93	17-29yrs/Male	Look for more trains		17-29yrs/Male	To stop and look for trains
94	17-29yrs/Male	To watch out for additional trains		17-29yrs/Male	That 2 trains may be passing
95	17-29yrs/Male	More trains may come after one has already gone through the crossing		17-29yrs/Male	Look for trains but is less specific and doesn't seem as important
96	17-29yrs/Male	More than one train may approach		17-29yrs/Male	Trains are approaching
97	17-29yrs/Male	Look both ways as multiple trains cross at the tracks		17-29yrs/Male	Look both ways
98	17-29yrs/Male	Additional trains crossing		17-29yrs/Male	Sign #2 is not as descriptive as Sign #1
99	17-29yrs/Female	Look both ways before crossing because more trains may be coming		17-29yrs/Female	Look
100	17-29yrs/Female	More trains are approaching		17-29yrs/Female	Look for additional trains - with less information



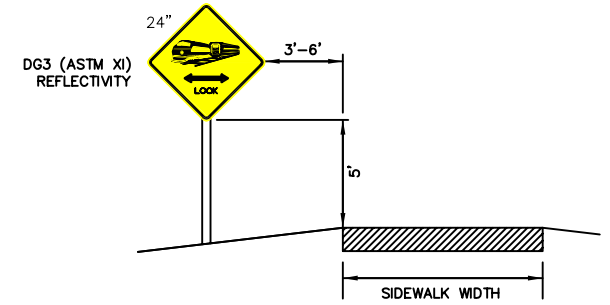
DETAIL 'A'



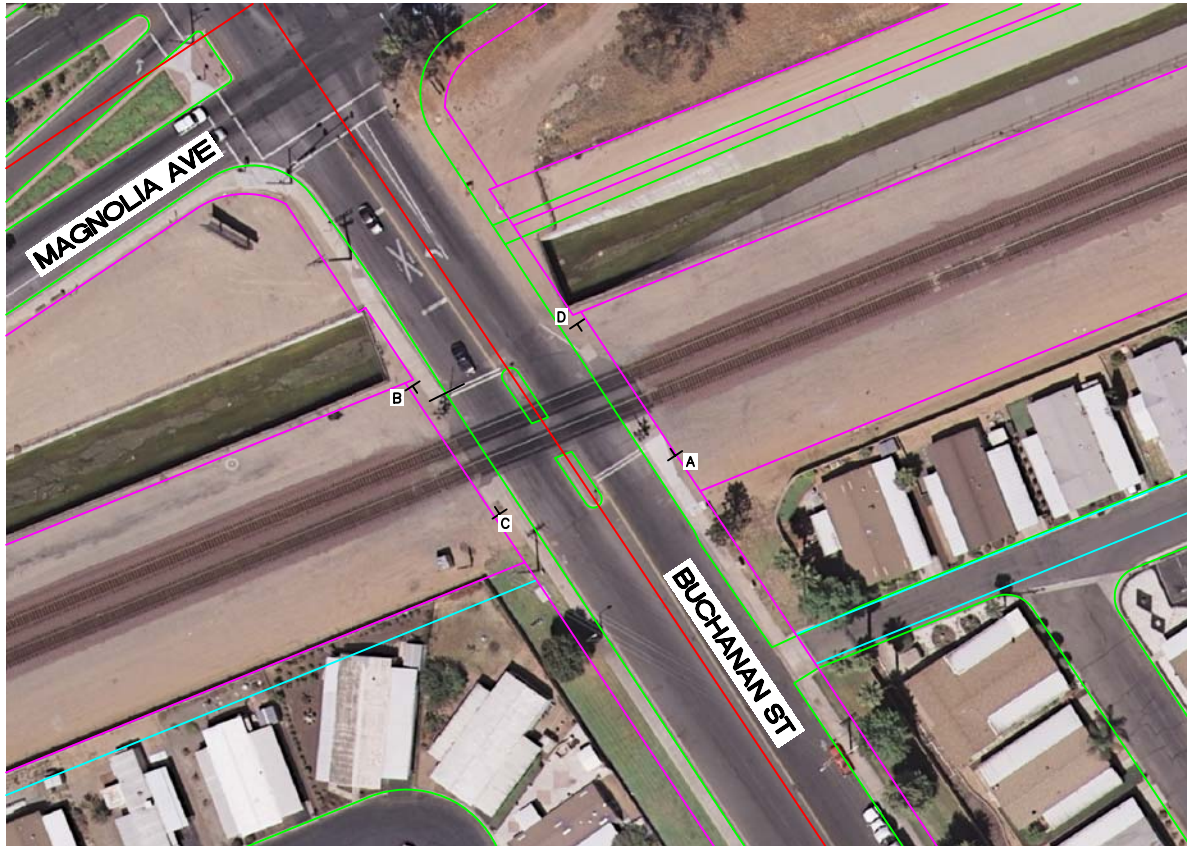
DETAIL 'B'



DETAIL 'C'



DETAIL 'D'



LEGEND

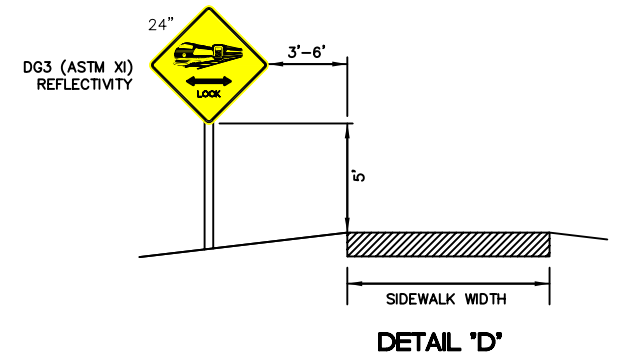
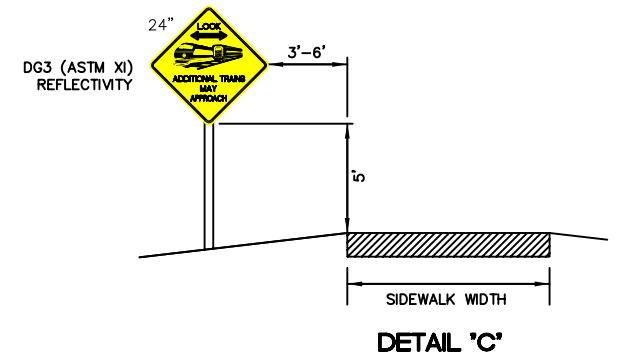
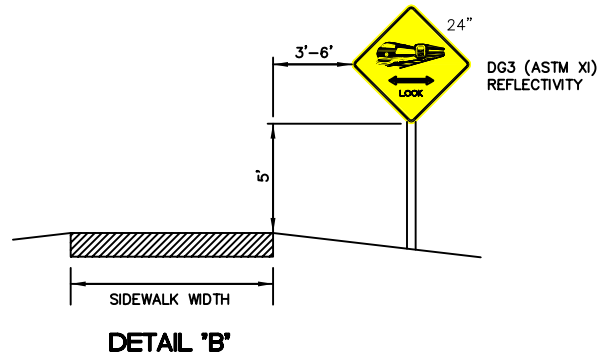
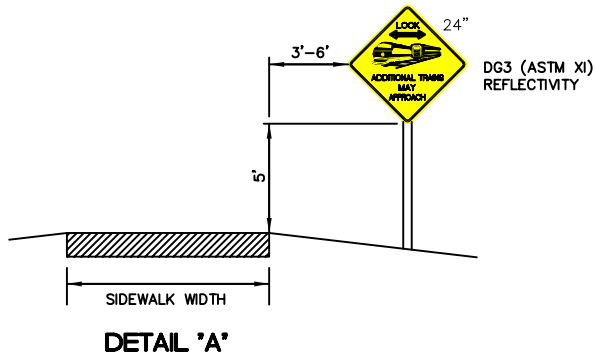
- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊕ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

LOCATION: BUCHANAN STREET

RAIL AGENCY: BNSF

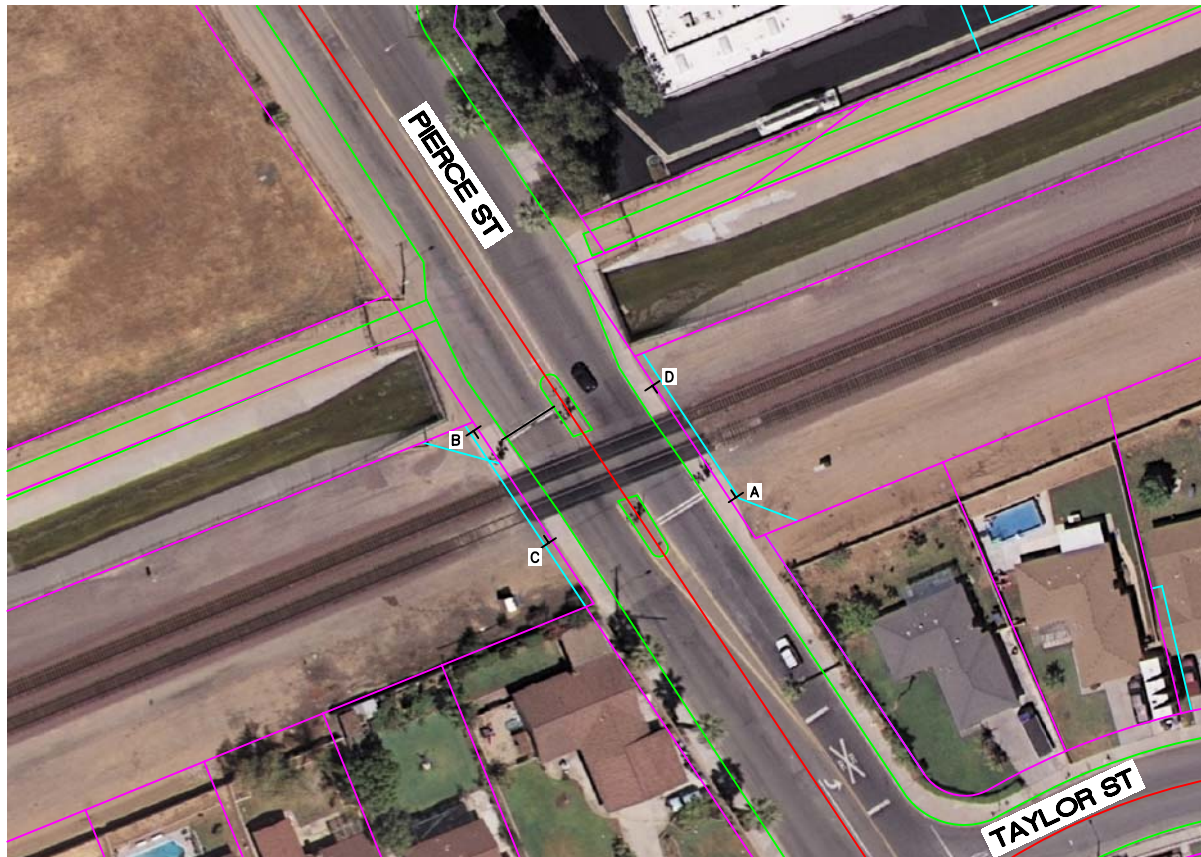


EXHIBIT No. 1



LEGEND

- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊕ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

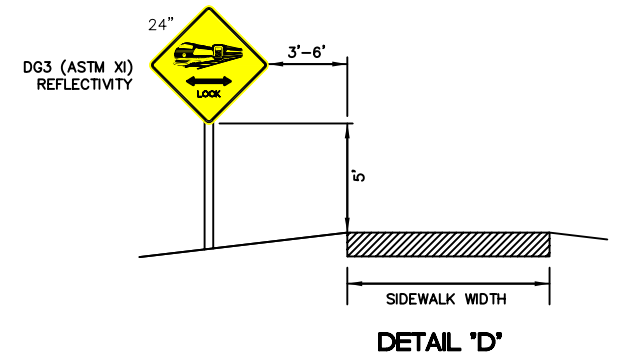
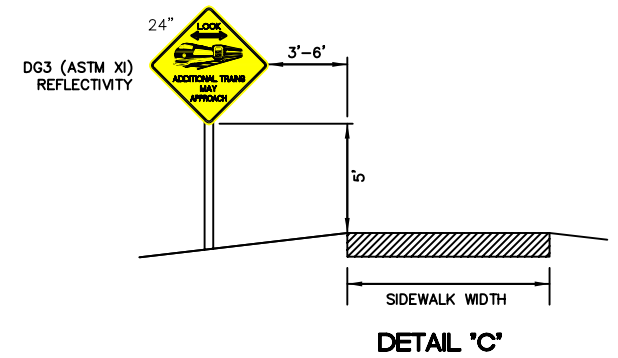
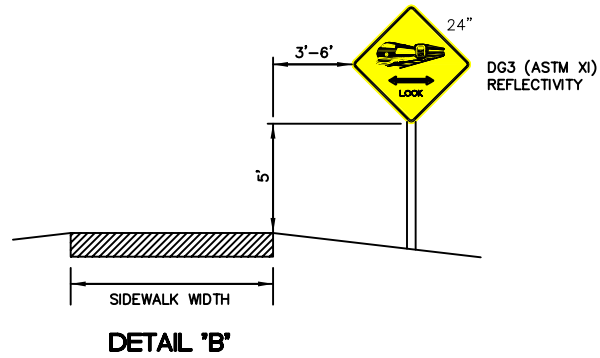
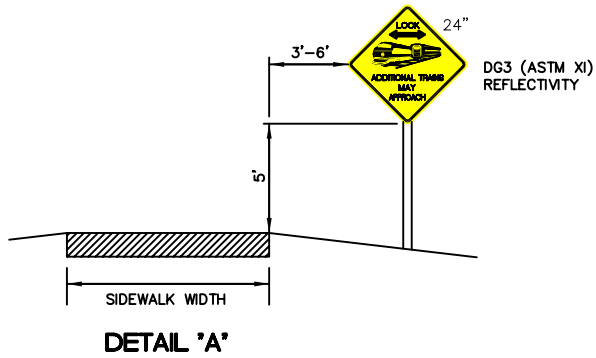


LOCATION: PIERCE STREET

RAIL AGENCY: BNSF

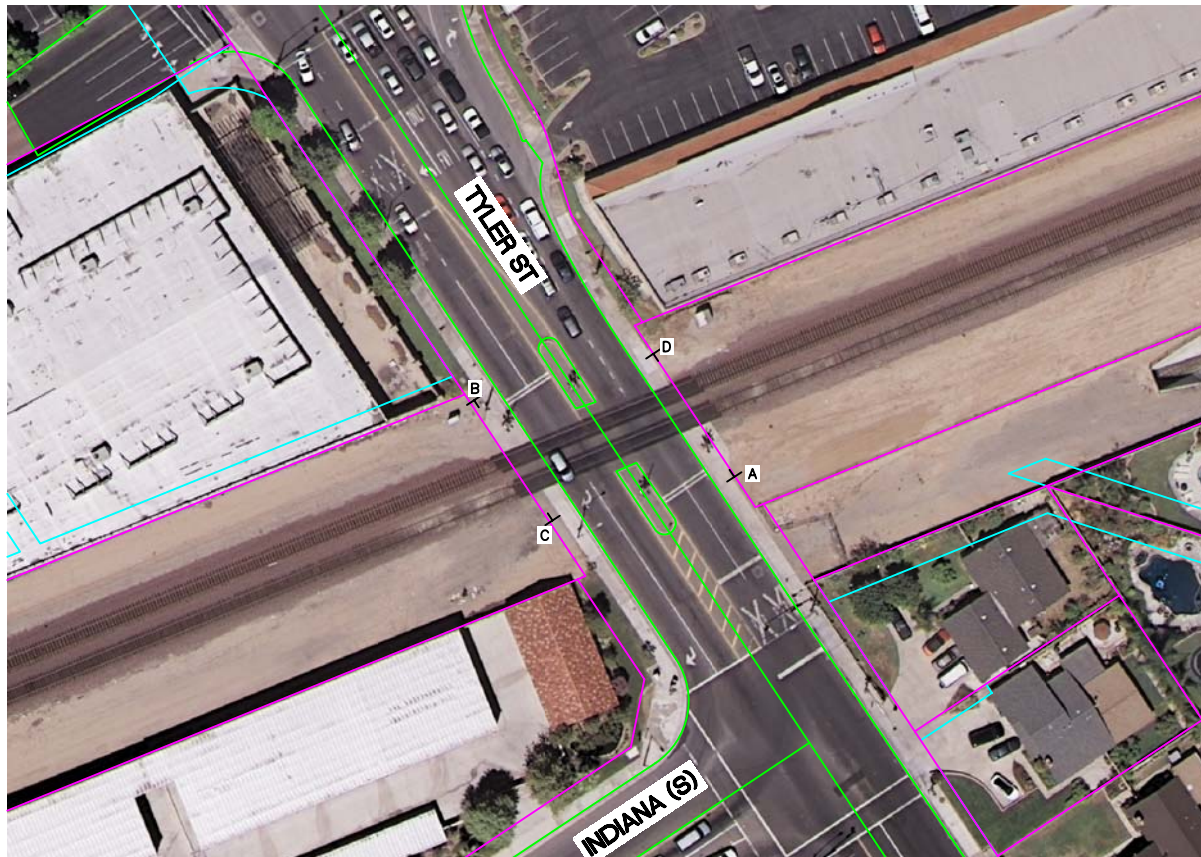


EXHIBIT No. 2



LEGEND

- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊙ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

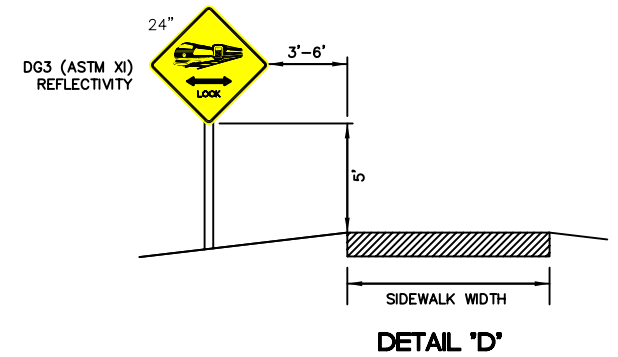
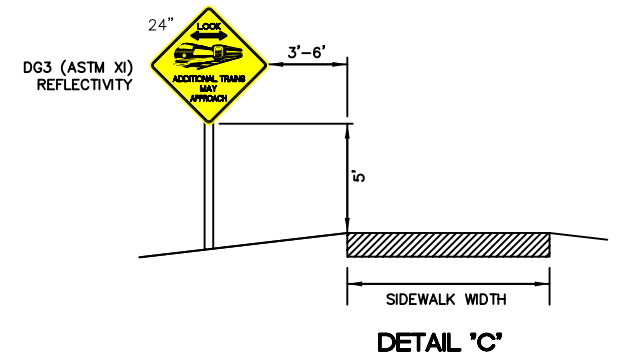
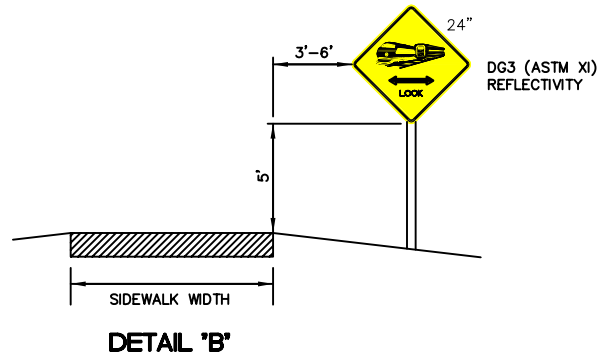
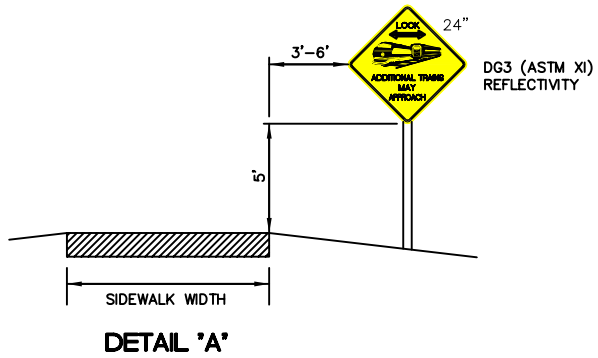


LOCATION: TYLER STREET

RAIL AGENCY: BNSF



EXHIBIT No. 3



LEGEND

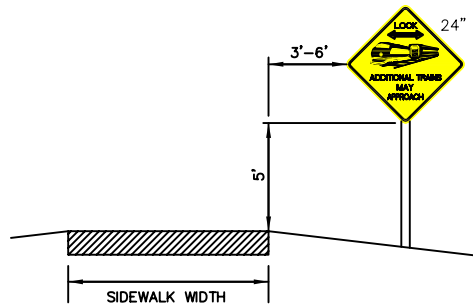
- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊥ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

LOCATION: HARRISON STREET

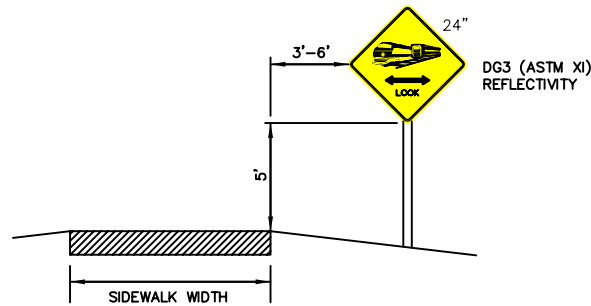
RAIL AGENCY: BNSF



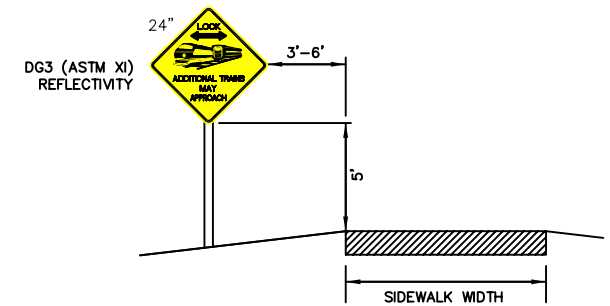
EXHIBIT No. 4



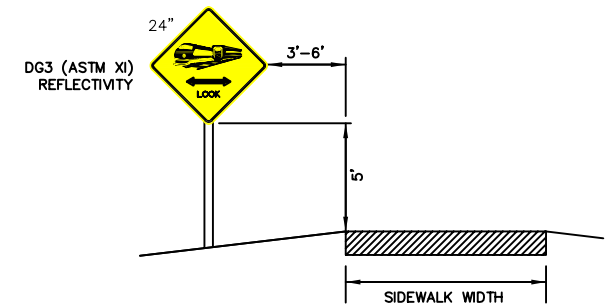
DETAIL 'A'



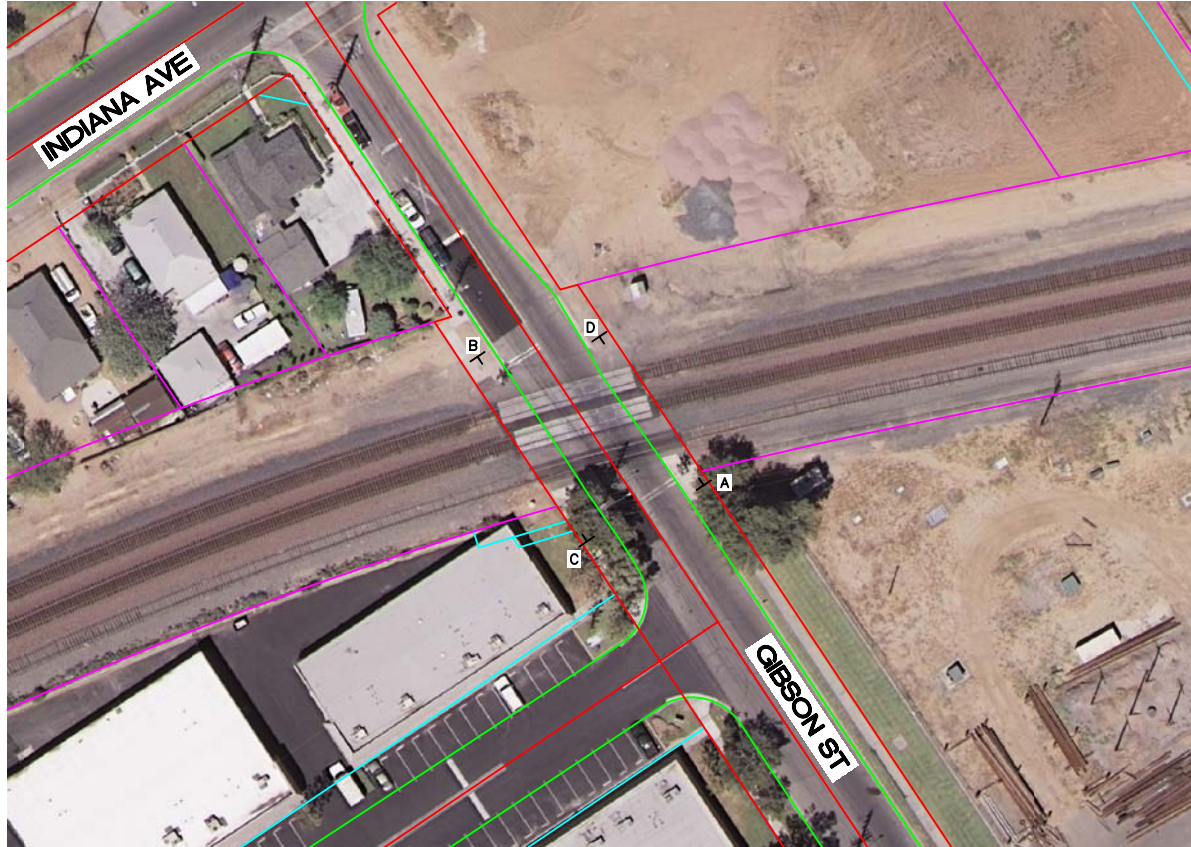
DETAIL 'B'



DETAIL 'C'




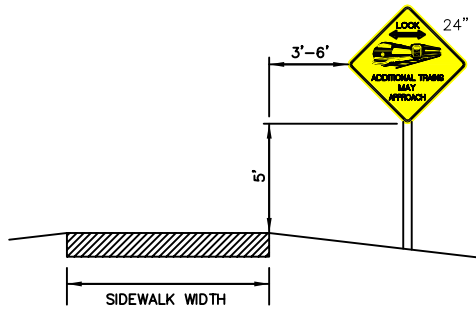
DETAIL 'D'



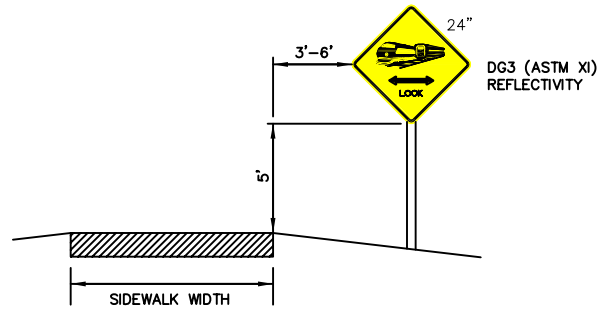
LEGEND

- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊕ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

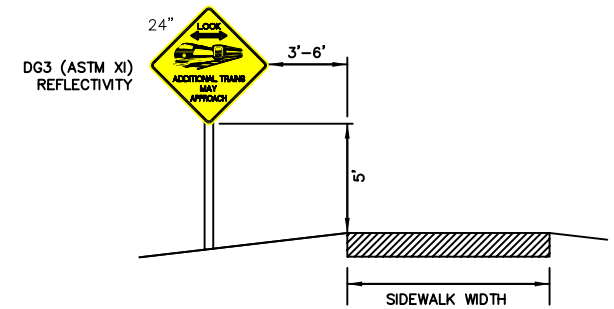
LOCATION: GIBSON STREET	
RAIL AGENCY: BNSF	
EXHIBIT No. 5	



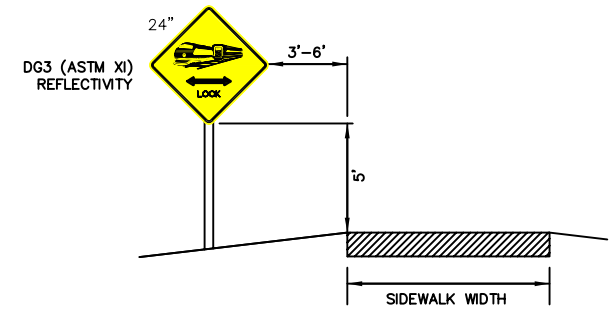
DETAIL 'A'



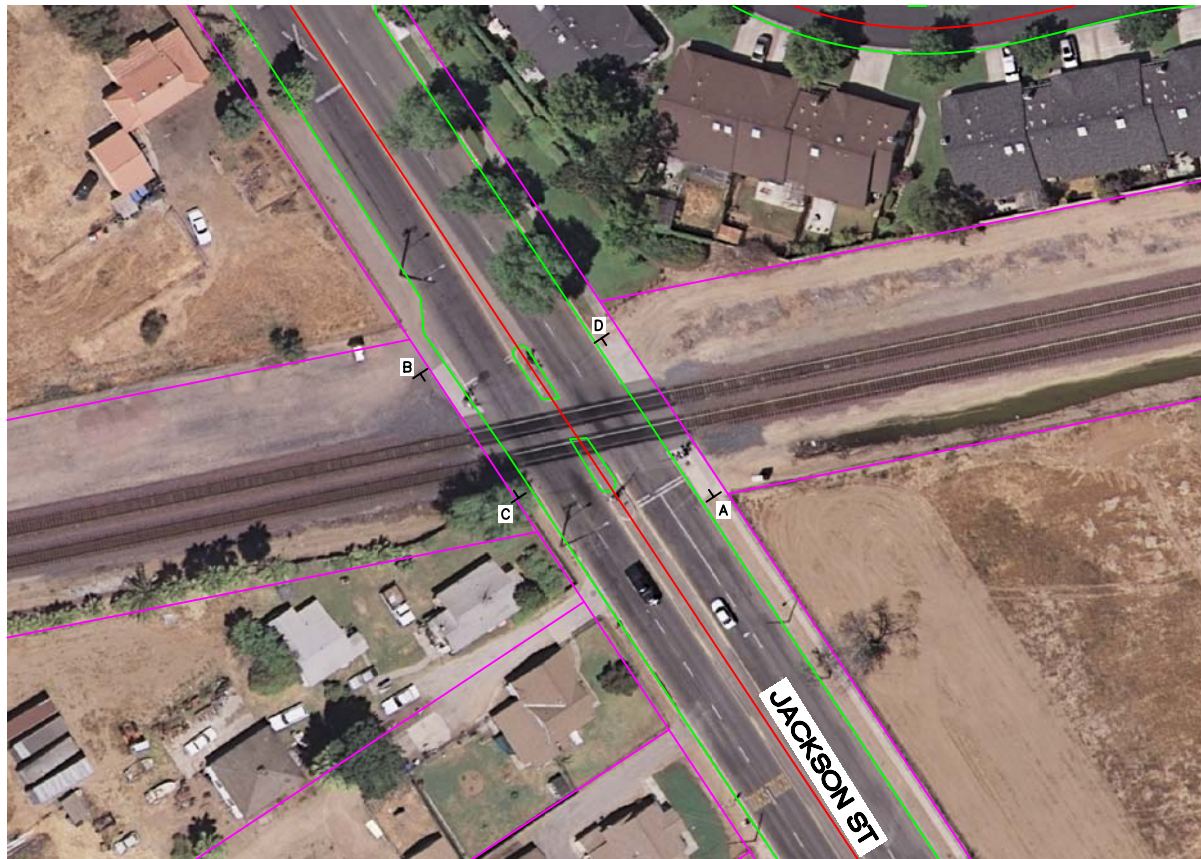
DETAIL 'B'



DETAIL 'C'



DETAIL 'D'



LEGEND

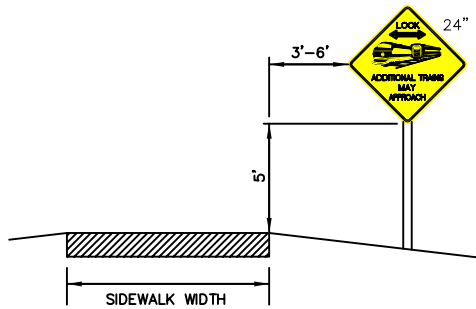
- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊙ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

LOCATION: JACKSON STREET

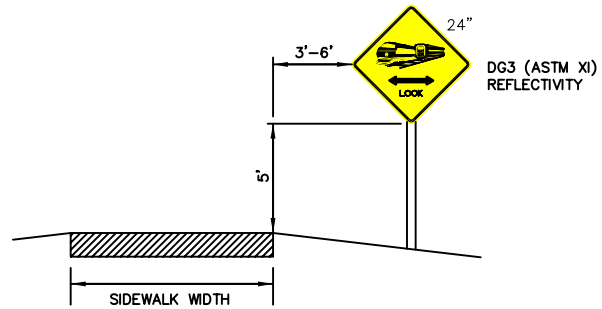
RAIL AGENCY: BNSF



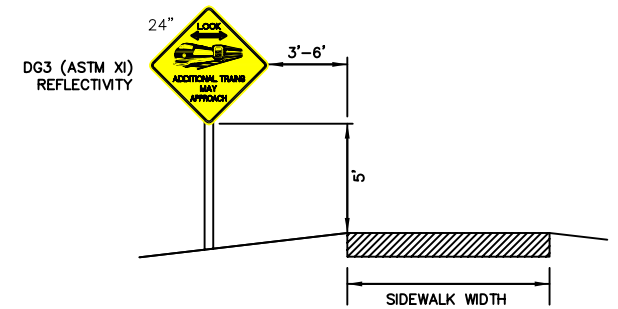
EXHIBIT No. 6



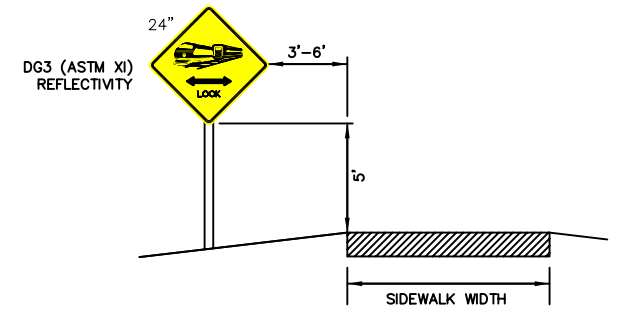
DETAIL 'A'



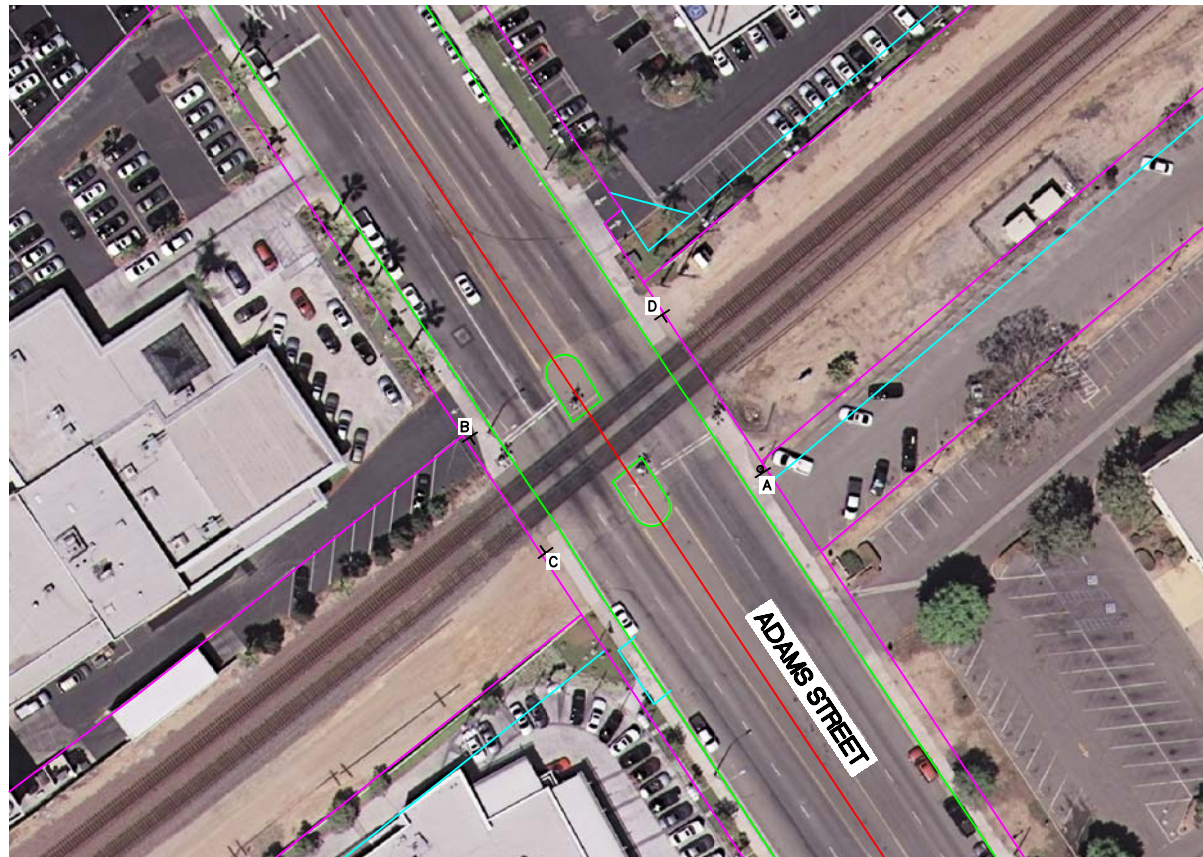
DETAIL 'B'



DETAIL 'C'



DETAIL 'D'



LEGEND

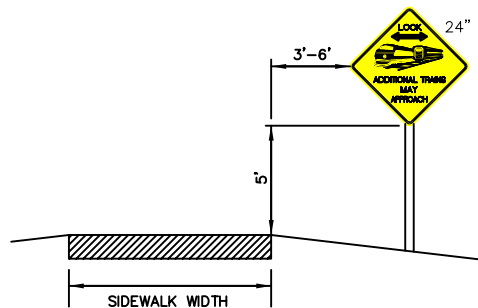
- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊙ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

LOCATION: ADAMS STREET

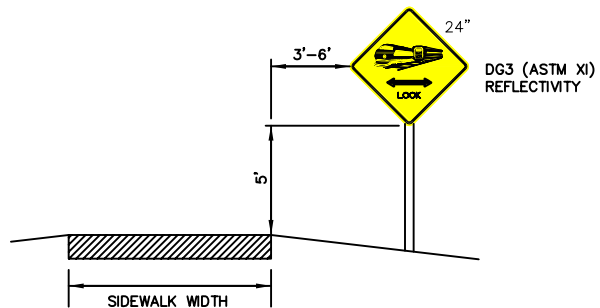
RAIL AGENCY: BNSF



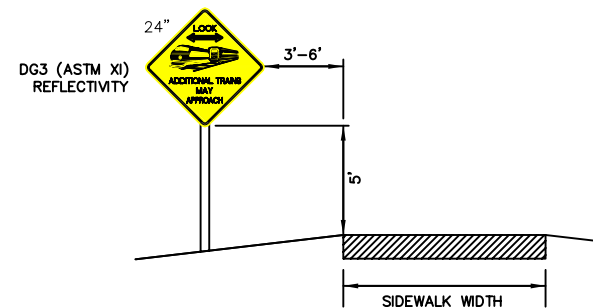
EXHIBIT No. 7



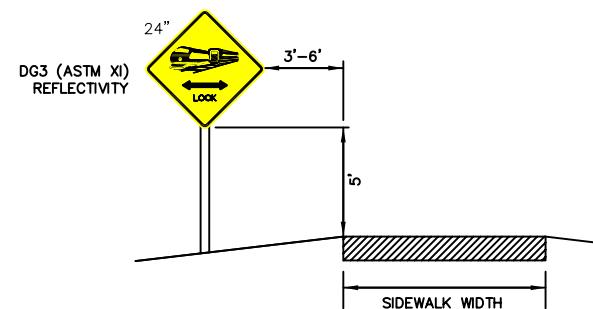
DETAIL 'A'



DETAIL 'B'



DETAIL 'C'



DETAIL 'D'



LEGEND

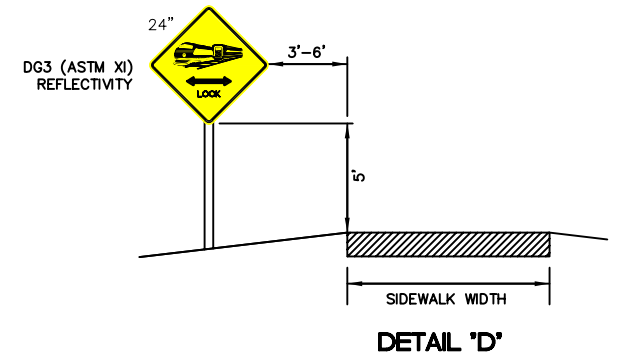
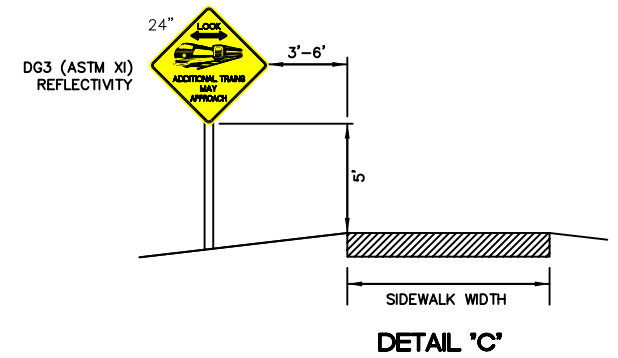
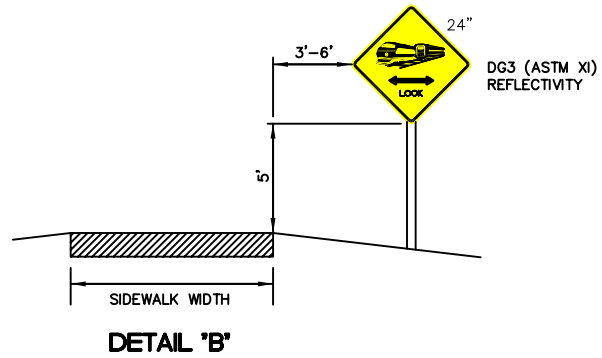
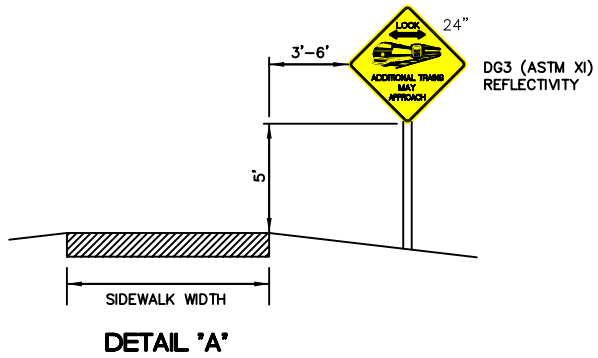
- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊕ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

LOCATION: JEFFERSON STREET

RAIL AGENCY: BNSF



EXHIBIT No. 8



LEGEND

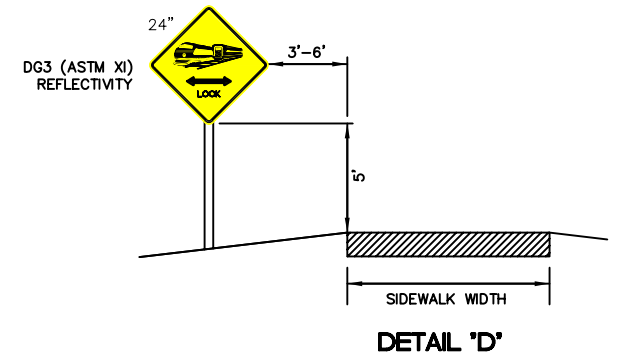
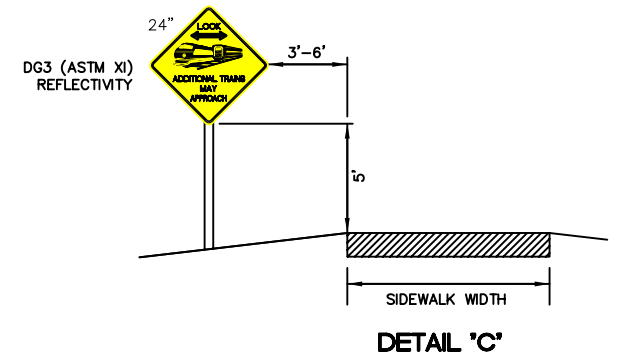
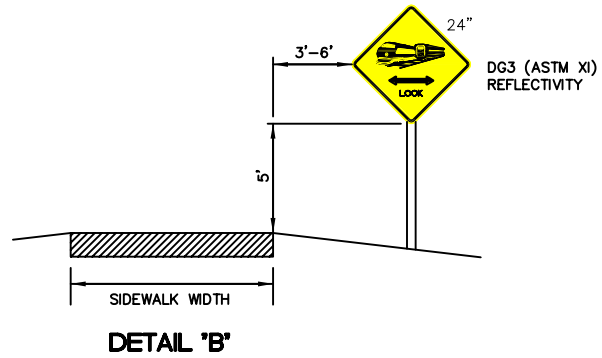
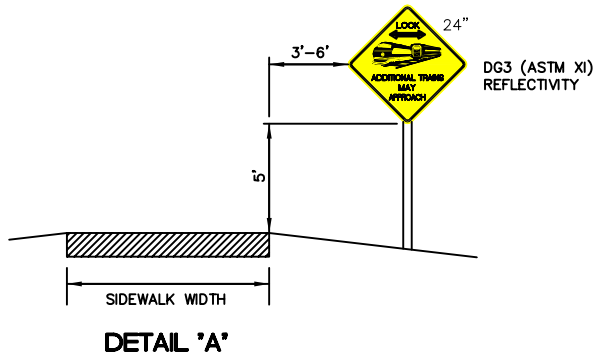
- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊕ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

LOCATION: MADISON STREET

RAIL AGENCY: BNSF




EXHIBIT No. 9

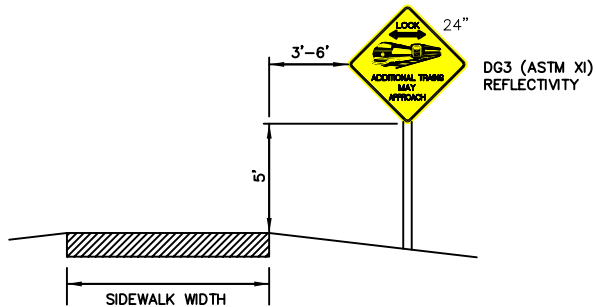


LEGEND

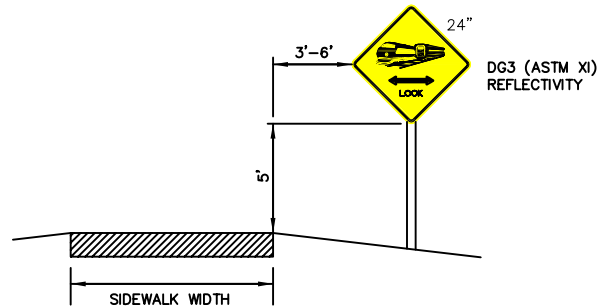
- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊕ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)



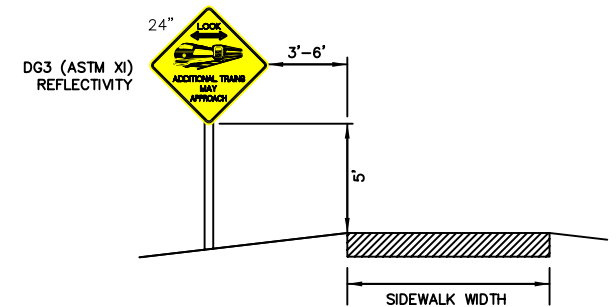
LOCATION: WASHINGTON STREET	
RAIL AGENCY: BNSF	
EXHIBIT No. 10	



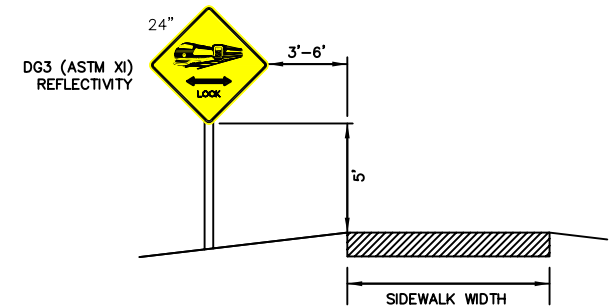
DETAIL 'A'



DETAIL 'B'



DETAIL 'C'




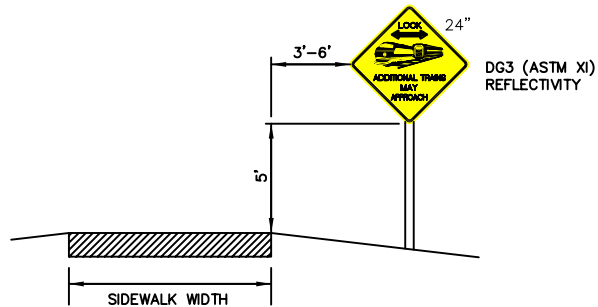
DETAIL 'D'



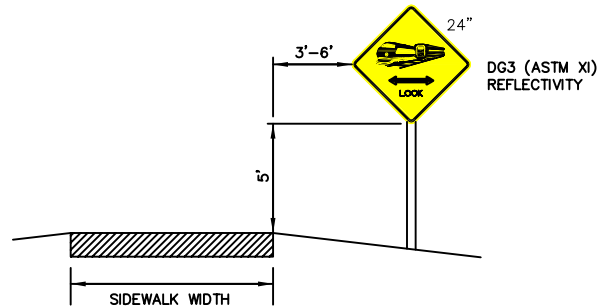
LEGEND

- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

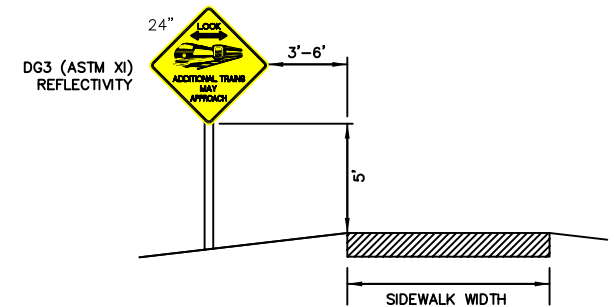
LOCATION: MARY STREET	
RAIL AGENCY: BNSF	
EXHIBIT No. 11	



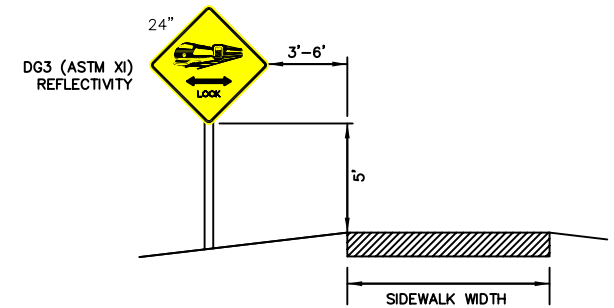
DETAIL 'A'



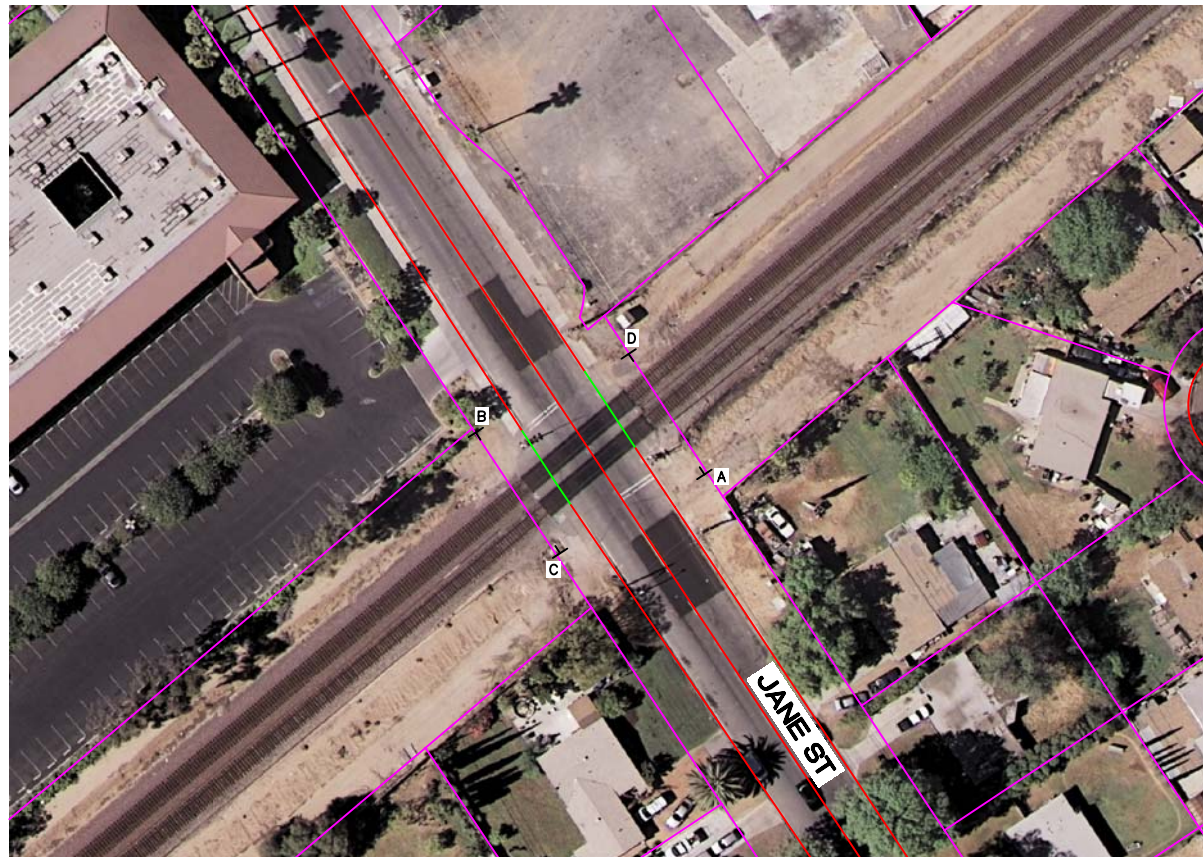
DETAIL 'B'



DETAIL 'C'



DETAIL 'D'



LEGEND

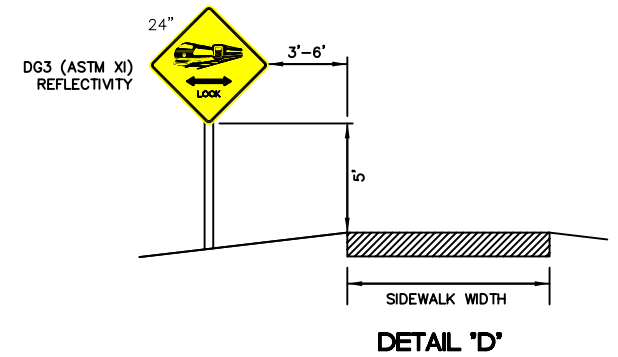
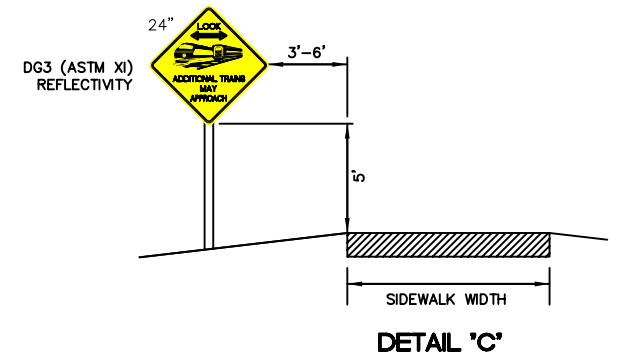
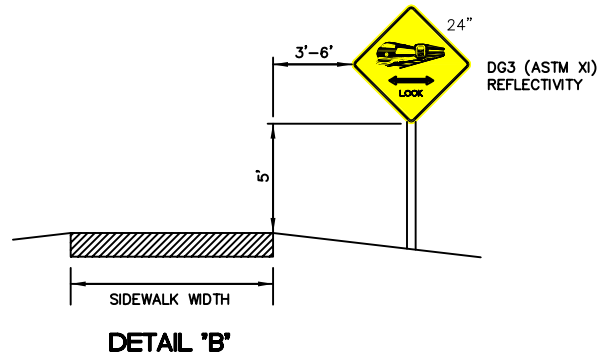
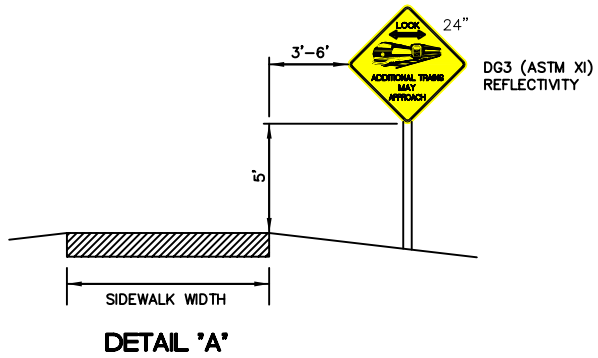
- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊕ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

LOCATION: JANE STREET

RAIL AGENCY: BNSF



EXHIBIT No. 12



LEGEND

- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊙ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

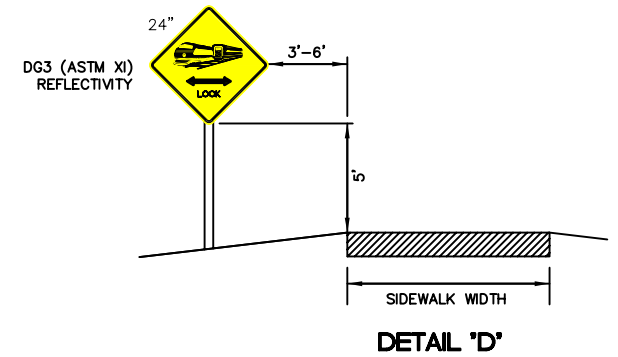
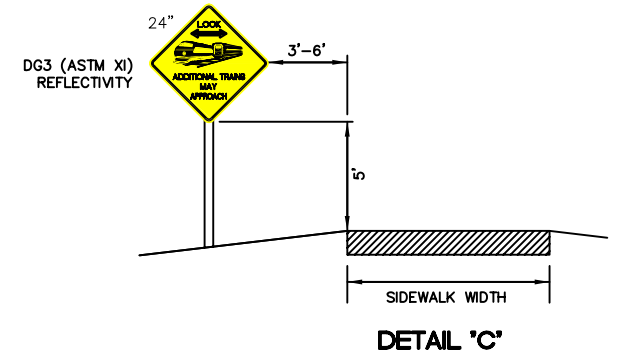
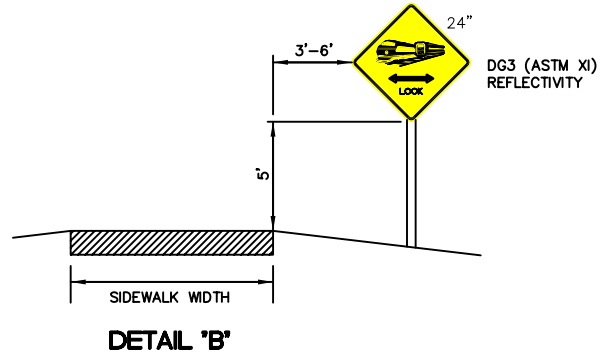
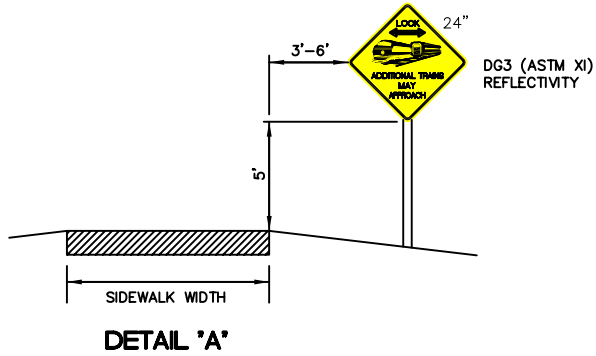


LOCATION: CRIDGE STREET

RAIL AGENCY: BNSF/UPRR

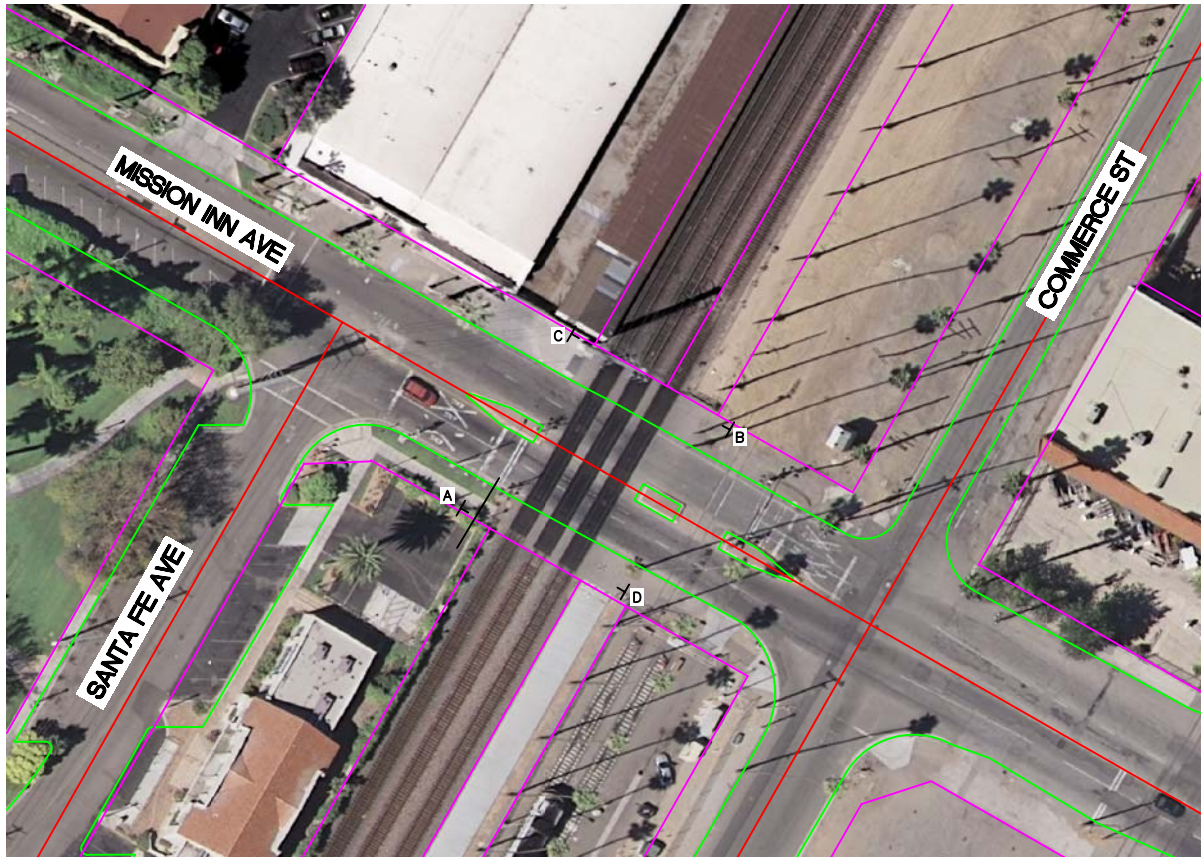


EXHIBIT No. 13



LEGEND

- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊙ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

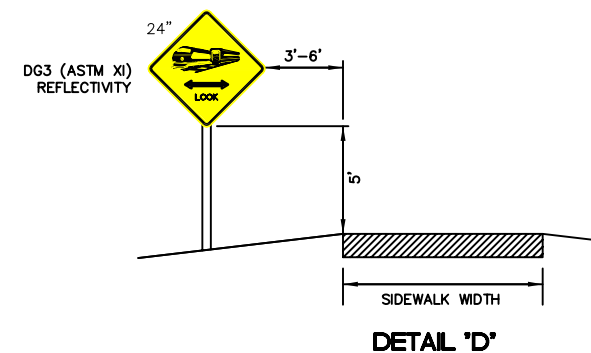
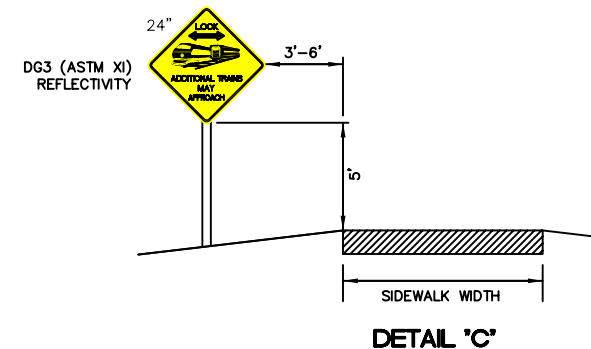
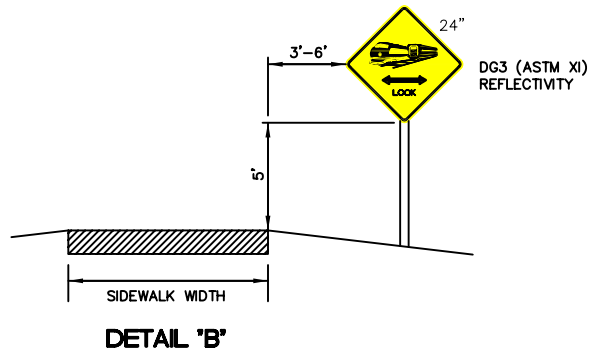
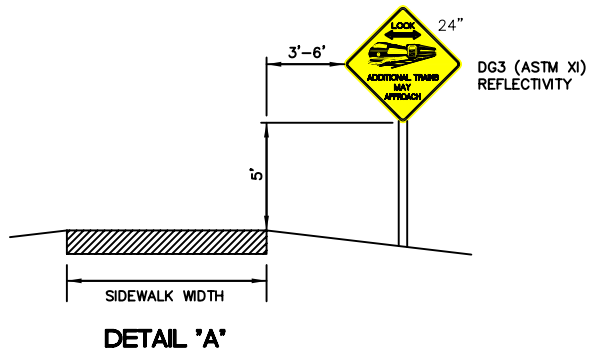


LOCATION: MISSION INN AVENUE

RAIL AGENCY: BNSF/UPRR

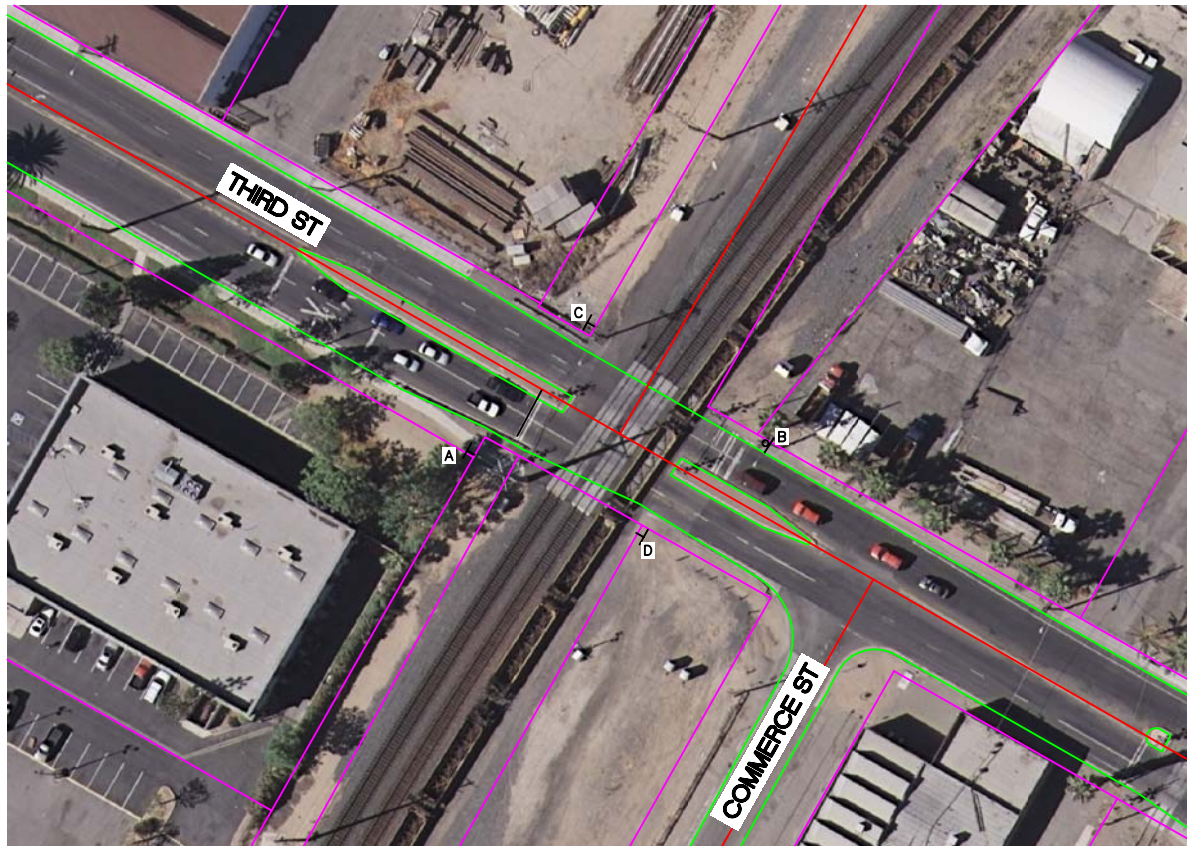


EXHIBIT No. 14



LEGEND

- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊥ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

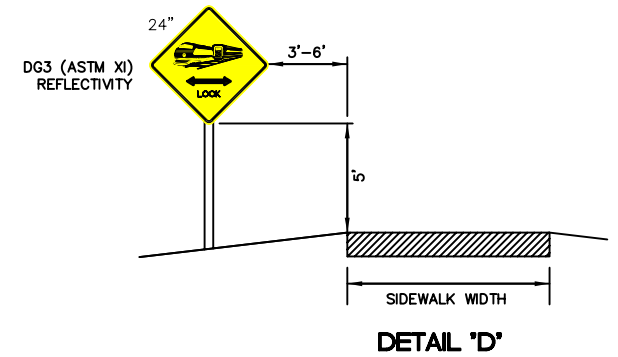
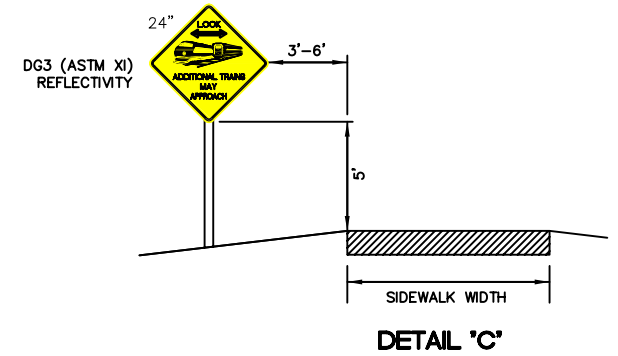
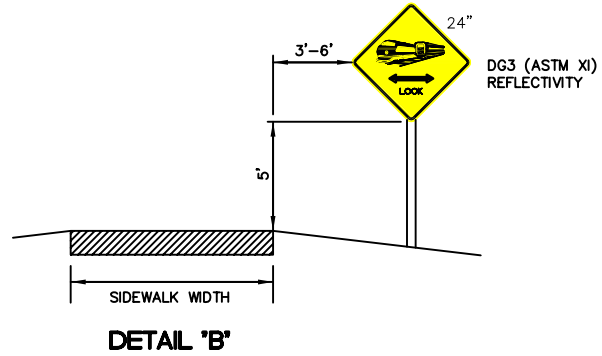
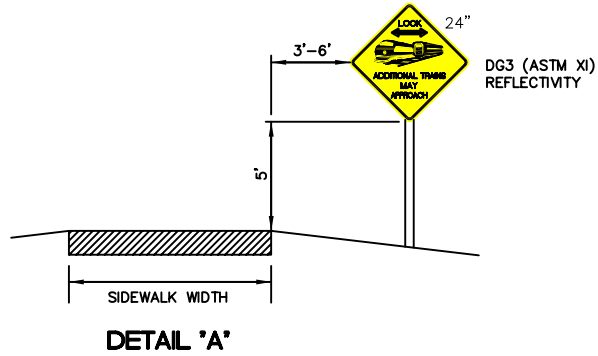


LOCATION: THIRD STREET

RAIL AGENCY: BNSF/UPRR

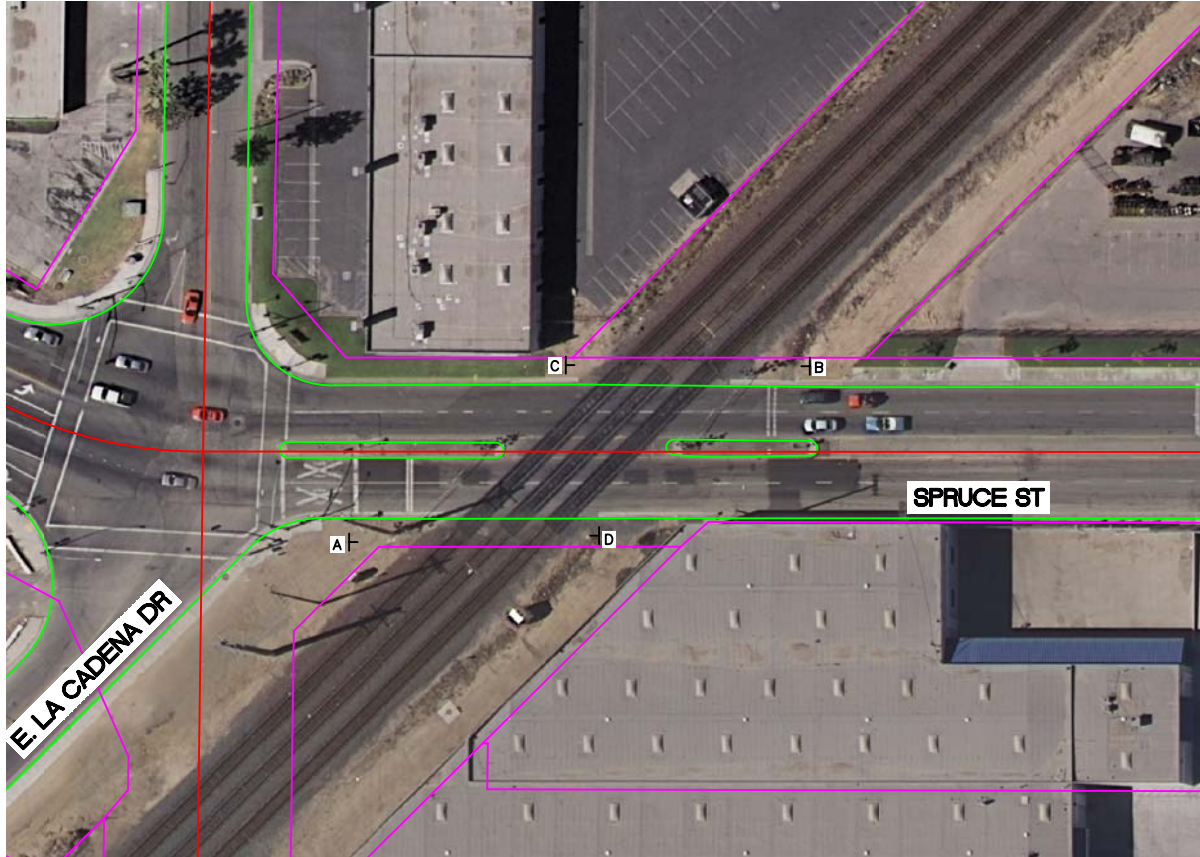


EXHIBIT No. 15



LEGEND

- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊔ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)



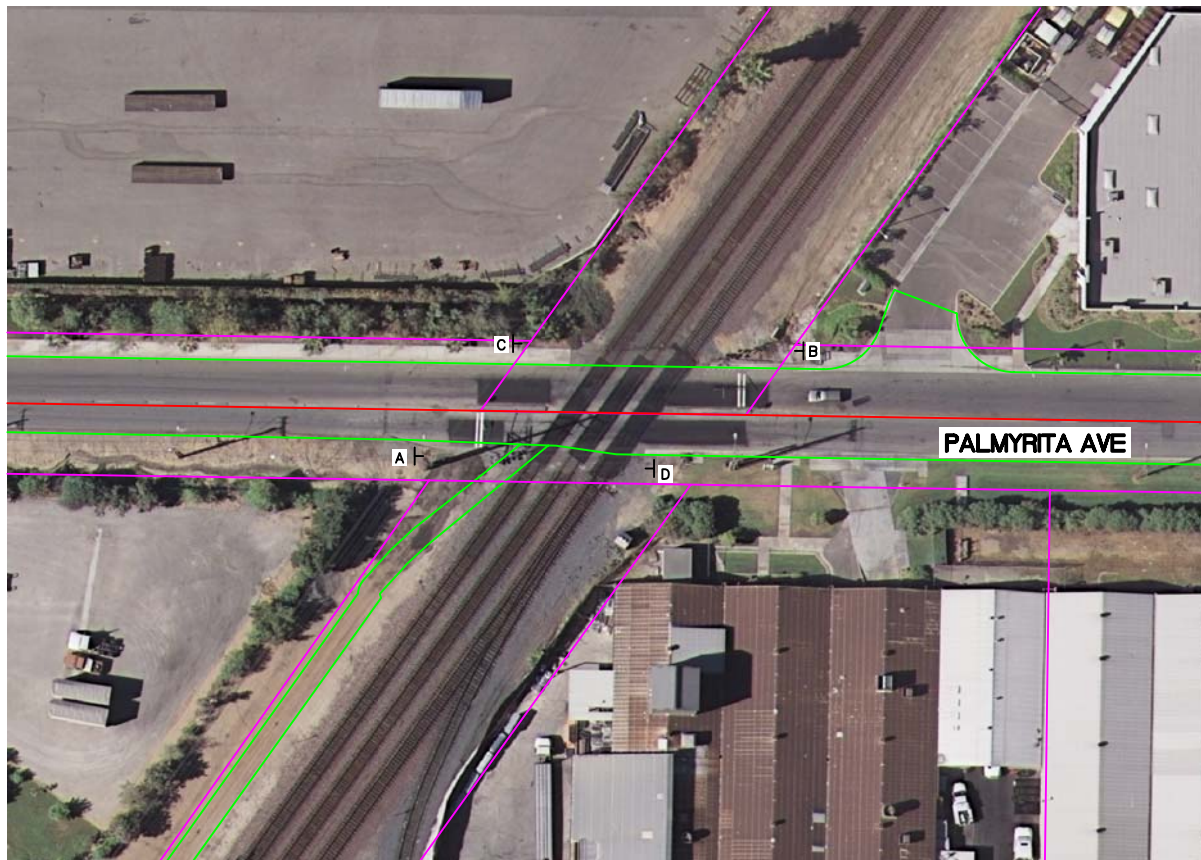
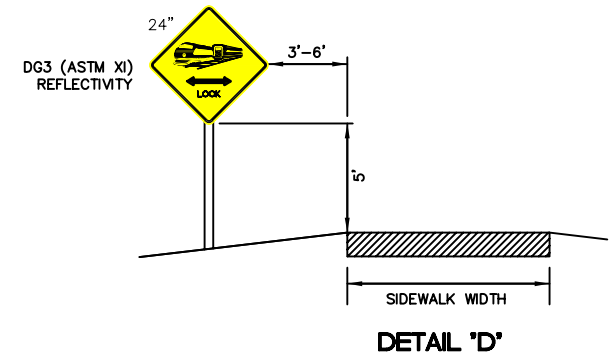
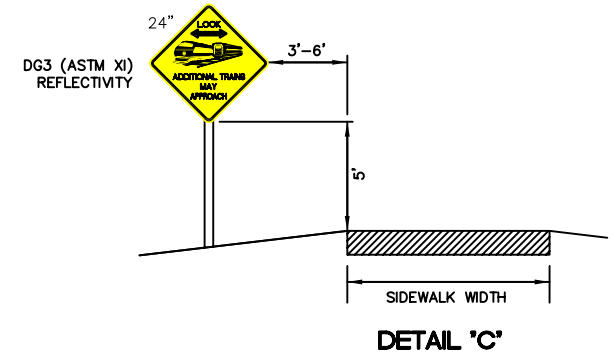
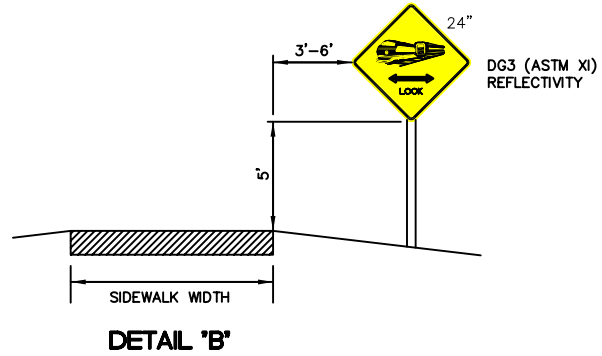
LOCATION: SPRUCE STREET

RAIL AGENCY: BNSF/UPRR



EXHIBIT No. 16


EXHIBIT No. 17

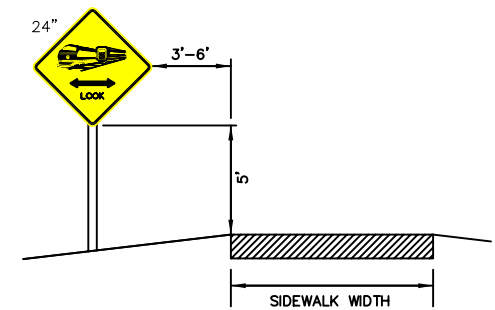
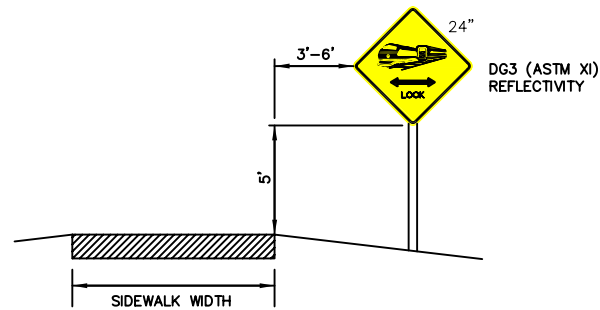
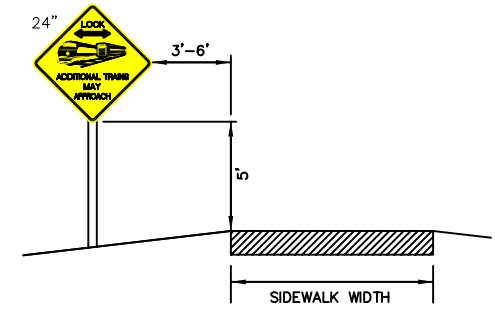
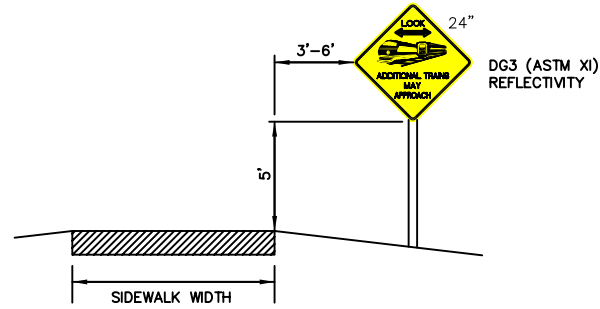
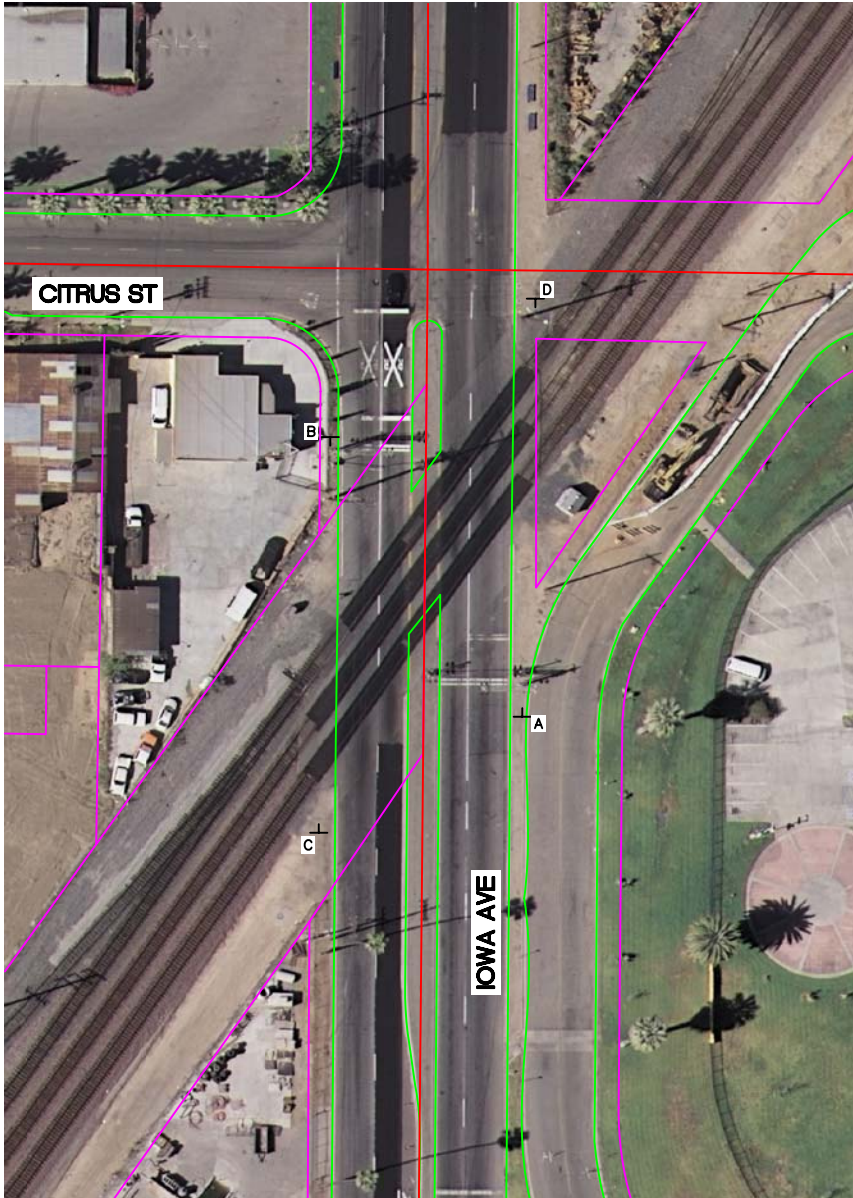


N.T.S.

LEGEND

1. PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
2. PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

LOCATION: PALMYRITA AVENUE	
RAIL AGENCY: BNSF/UPRR	
EXHIBIT No. 18	



LEGEND

- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊙ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

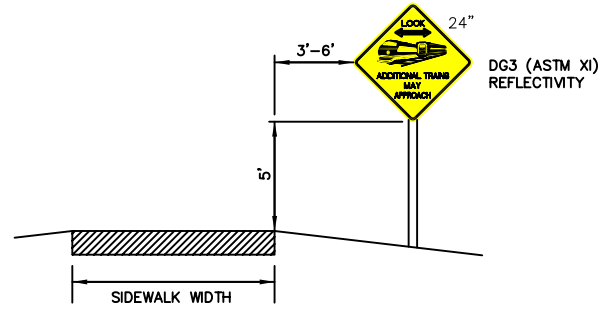
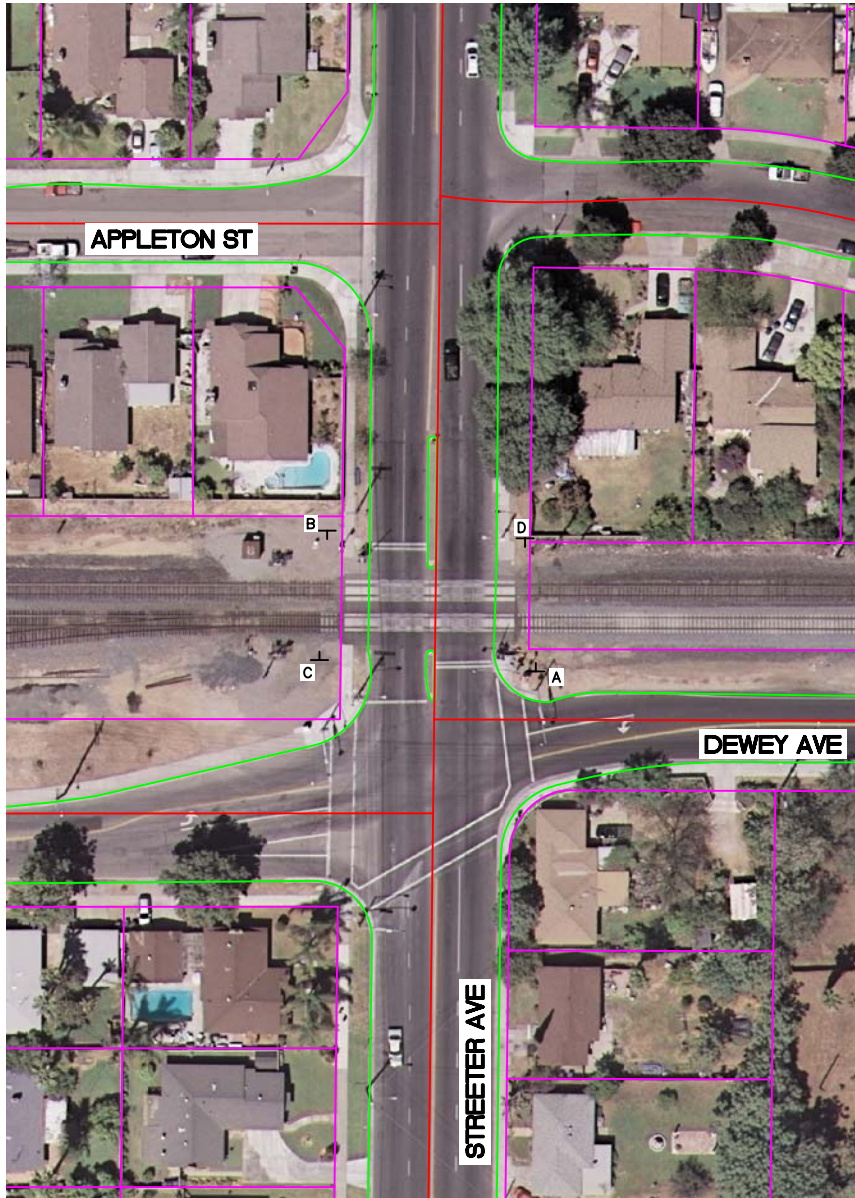


LOCATION: IOWA AVENUE

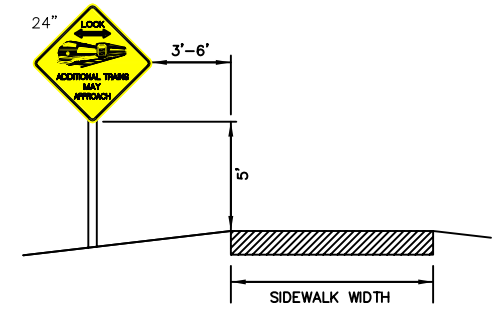
RAIL AGENCY: BNSF/UPRR



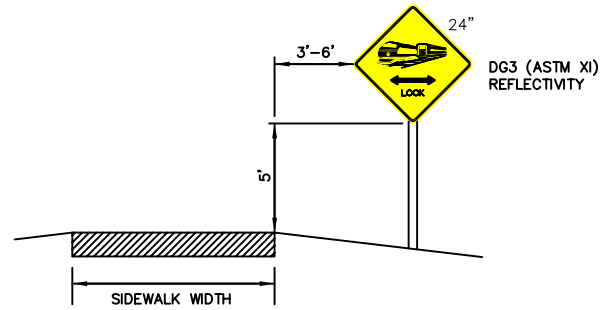
EXHIBIT No. 19



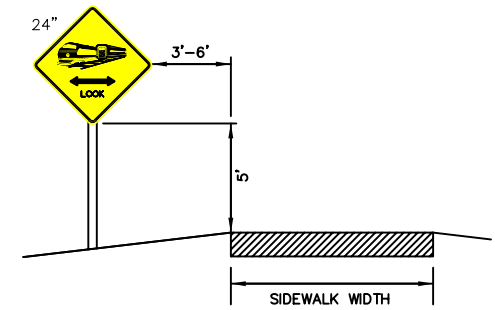
DETAIL 'A'



DETAIL 'C'



DETAIL 'B'



DETAIL 'D'

LEGEND

- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊙ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

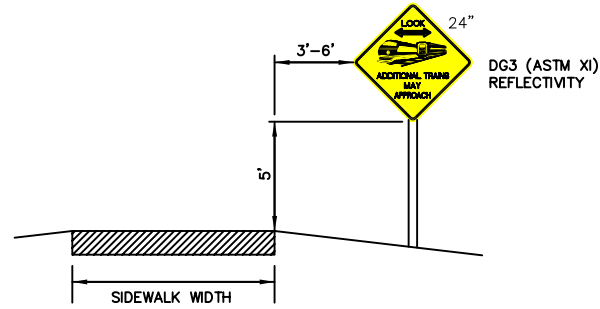
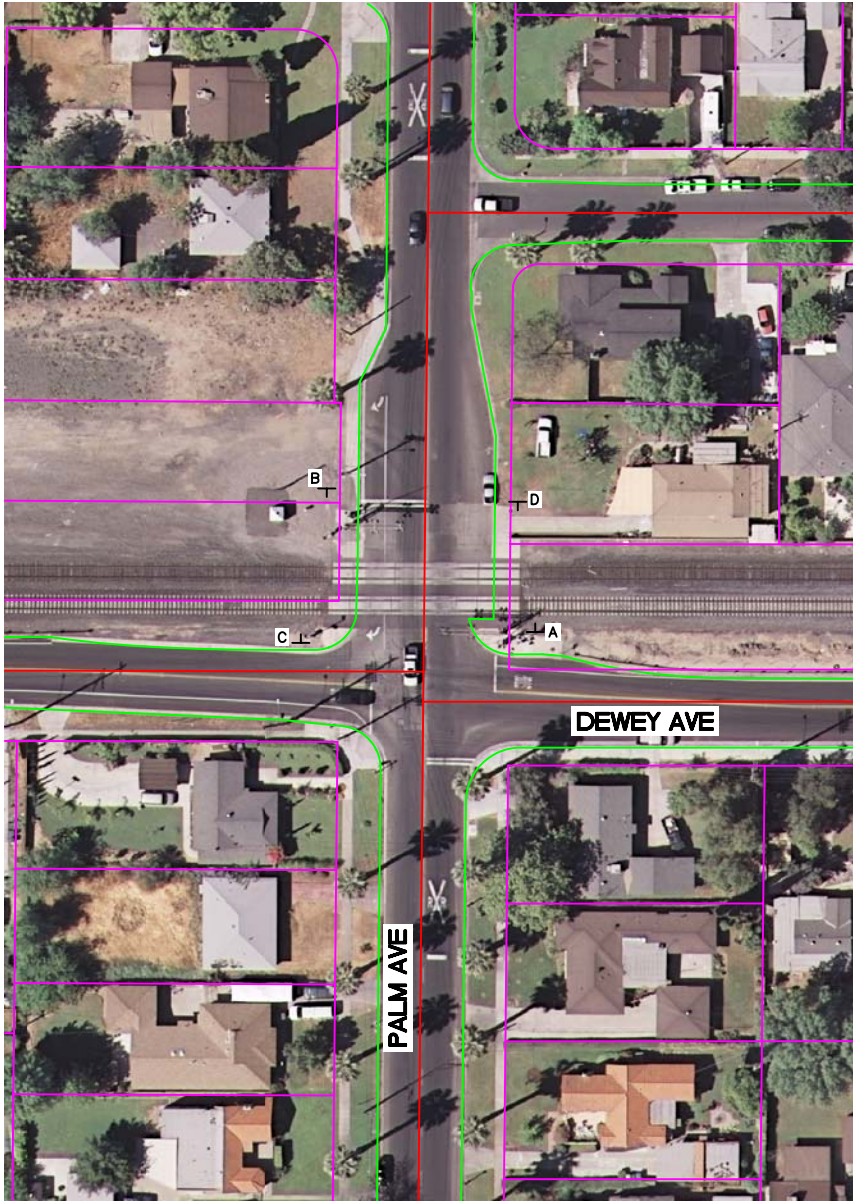


LOCATION: STREETER AVENUE

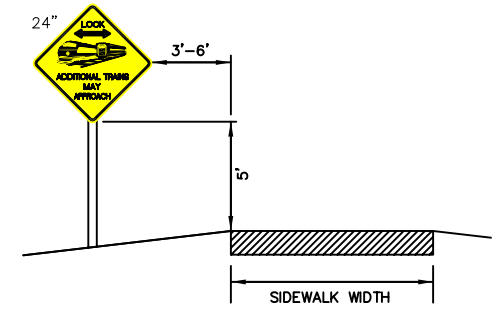
RAIL AGENCY: UPRR



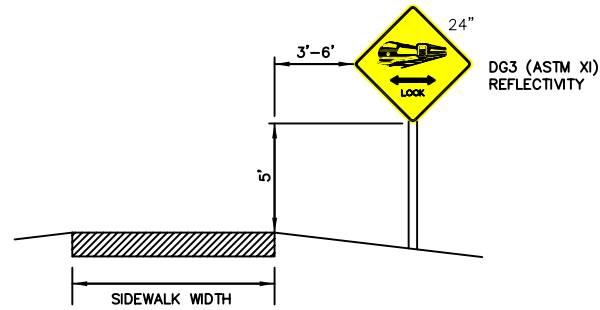
EXHIBIT No. 20



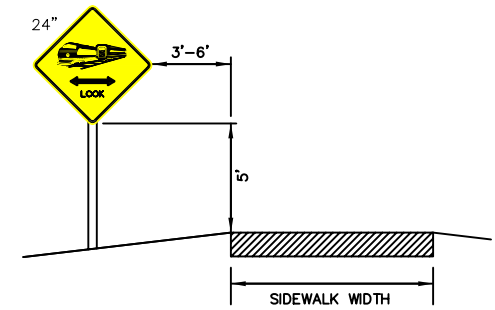
DETAIL 'A'



DETAIL 'C'



DETAIL 'B'



DETAIL 'D'

LEGEND

- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊙ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)

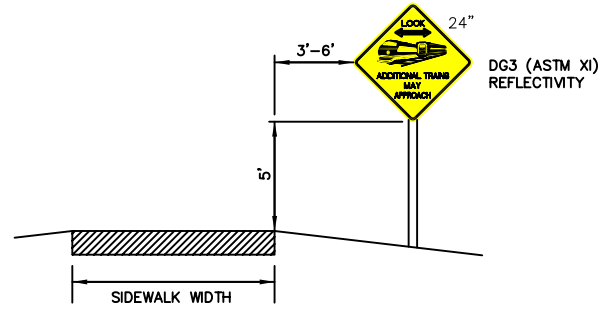
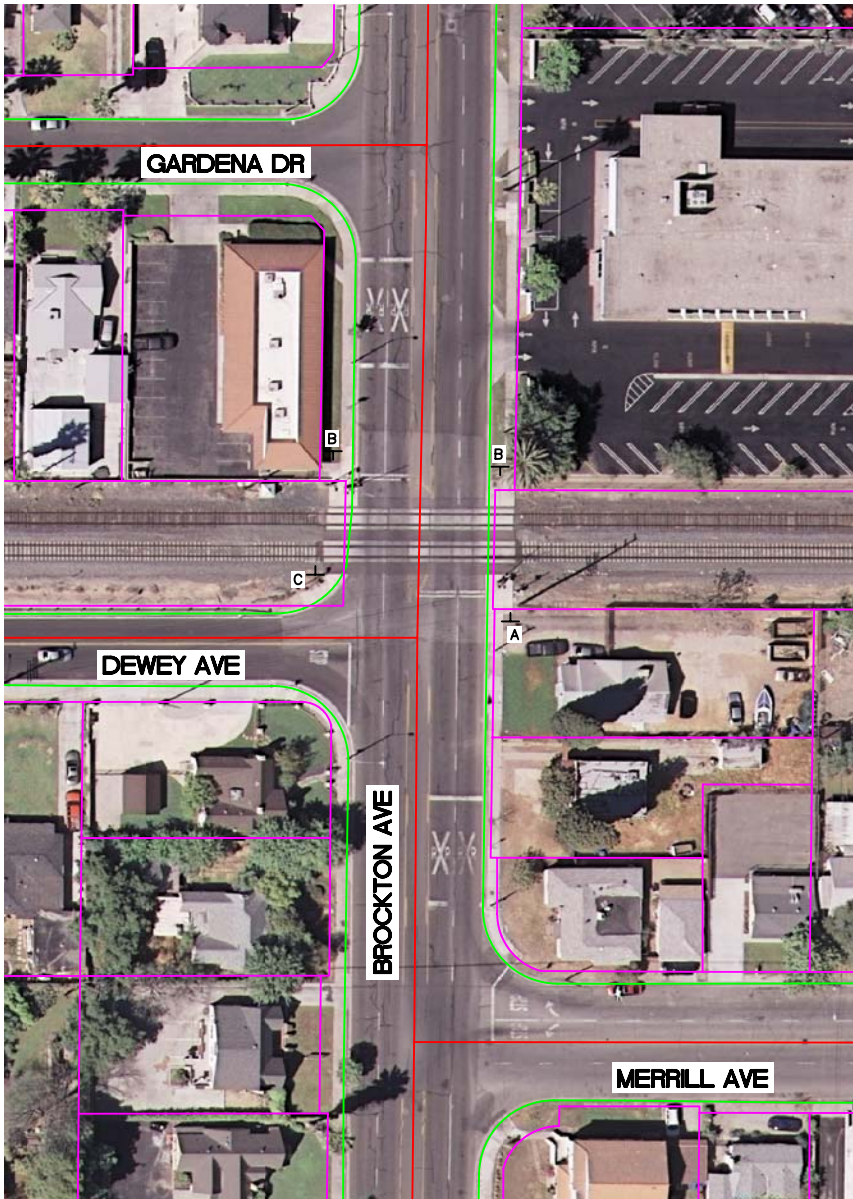


LOCATION: PALM AVENUE

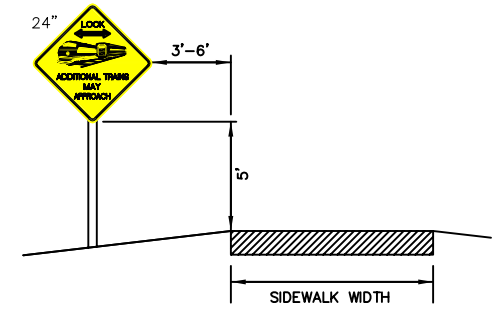
RAIL AGENCY: UPRR



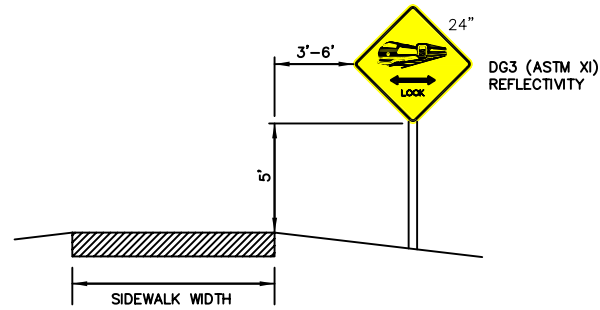
EXHIBIT No. 21



DETAIL 'A'



DETAIL 'C'



DETAIL 'B'

LEGEND

- ⊥ PROPOSED SIGN (ONE POST)
(TYPICALLY 7' BEHIND THE RR LIMIT LINE ON THE APPROACH SIDE)
- "X" INSTALLATION PER DETAIL "X"
- ⊙ PROPOSED SIGN (STRAP MOUNT TO LIGHT STANDARD)



LOCATION: BROCKTON AVENUE

RAIL AGENCY: UPRR



EXHIBIT No. 22